

**AMERICAN**  
**RAILROAD JOURNAL.**

**STEAM NAVIGATION, COMMERCE, FINANCE,**

**INSURANCE, BANKING, MINING, MANUFACTURES.**

**HENRY V. POOR, *Editor.***

**SATURDAY, JANUARY 12, 1861.**

**Second Quarto Series, Vol. XVII., No. 2.—Whole No. 1,291, Vol. XXXIV.**

**ESTABLISHED IN 1831.**

**NEW-YORK:**  
**PUBLISHED WEEKLY, BY**  
**JOHN H. SCHULTZ & CO.**  
**Front Room, Third Floor,**  
**No. 9 Spruce Street.**

# Iron Bridge Contractors.

THE TRENTON LOCOMOTIVE COMPANY  
contract to erect complete,

## IRON BRIDGES

Upon Wooden, Stone or Iron Abutments and Piers,  
FOR MUNICIPALITIES,  
OR RAILROAD COMPANIES.

Having been in the business for several years, they have a large experience and ample facilities. They refer to their Bridges built for the NORFOLK AND PETERSBURG RAILROAD COMPANY, and to their work now in progress for the CHARLESTON AND SAVANNAH RAILROAD COMPANY.

They also manufacture

## CAR WHEELS,

Freight, Platform, Coal, Ore and Lime Cars,  
AND ALL DESCRIPTIONS OF

## RAILROAD WORK.

Also IRON BUILDINGS & IRON ROOFS.

Address: A. H. VANCELEVE, Pres't,  
TRENTON, N. J.

## CHARLES E. SMITH & CO., FAIRMOUNT IRON WORKS,

29th Street, above Coates, Schuylkill,

PHILADELPHIA, PA.

MANUFACTURERS OF

ALL SIZES OF RAILS.

OLD RAILS RE-ROLLED.

STREET RAILS.

SMALL RAILROAD IRON

Suitable for Turnouts, Ware-

houses, Coal Yards, etc. Also

Marble and Stone Saws,

T and L IRON,

Railroad Chair Iron and Bands, and Bars,

OF EXTRA WIDTH, LENGTH, OR GAUGE.

PUNCHED WASHERS.

## ROLLED CHAIRS

WITH SINGLE OR DOUBLE CONTINUOUS LIPS;

Rail Joints, Shoes, Splices and Fishing Pieces

OF EVERY DESCRIPTION.

CHARLES E. SMITH, CHAS. WHEELER,  
STEPHEN MORRIS, STEPHEN P. M. TASKER,  
THOS. T. TASKER, JR.

## MITCHELL & WORCESTER, GENERAL COMMISSION MERCHANTS,

Agents for the sale of



## SAFES

AND LOCKS,

RAILWAY SUPPLIES,

FORGINGS,

NAILS, TACKS, ETC.

No. 146 Chambers st.,

NEW YORK.

## RICHARD DUDGEON, MACHINIST,

24 COLUMBIA ST., NEW YORK,

WOULD respectfully inform his friends and the public that he has removed to his new Building No. 24 Columbia Street, where he is prepared to furnish

Hydraulic Jacks,

of from 4 to 150 tons

lifting power. PULL-

ING JACKS of differ-

ent sizes.

Hydraulic Presses

WITH FLATENS.

Hydraulic Punches

for punching iron from

three-eighths to 1 inch

thick. Force Pumps

for Hydraulic Presses.

Force Pumps for test-

ing tubes, cylinders, etc.

STEAM CARRIAGES for good hard roads—

Squirting Oil Cans, also Danver's Patent Steam Hammer.



TRADE MARK.



TRADE MARK.



THE CROCKETT LEATHER CLOTH CO.,  
Corner Mill and Brown Sts., NEWARK, N. J.

MANUFACTURERS OF

## J. R. & C. P. CROCKETT'S PATENT ENAMELED LEATHER CLOTHS,

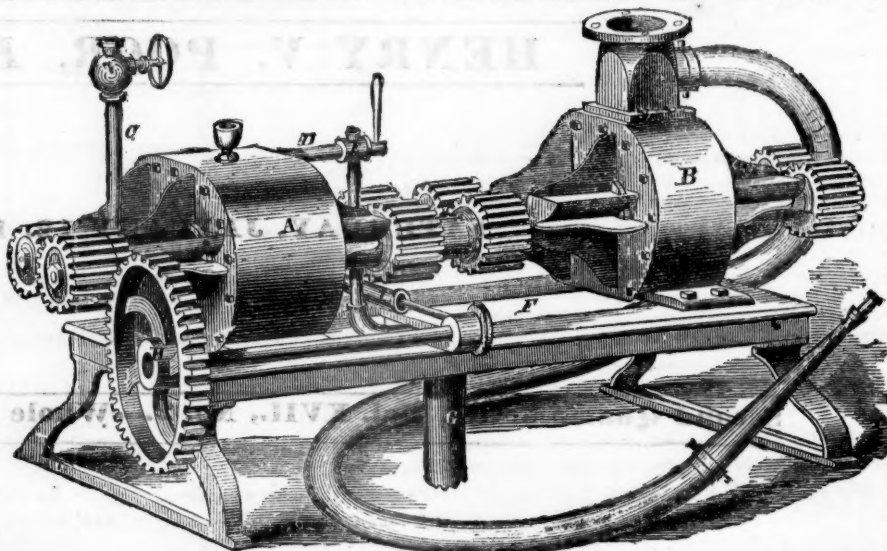
OF ALL COLORS, ALSO

VERY SUPERIOR COACH AND FURNITURE VARNISHES,

WARRANTED TO STAND IN ANY CLIMATE.

G. EDWARDS, Agent, Office, 165 William St., NEW YORK.

## RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP AND ENGINE, the most simple, durable and reliable PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

## R. H. DICKSON, Commission Merchant,

AND DEALER IN

GUM COPAL, PAINTS, OILS, DRUGS,

VARNISHES, ETC.,

10 CEDAR STREET,

NEW YORK.

## D. VAN NOSTRAND, BOOKSELLER, PUBLISHER,

AND

## IMPORTER,

192 BROADWAY, NEW YORK,

(UP-STAIRS.)

BOOKS imported from London and Paris by every steamer, and at the lowest possible rates, and, for Public Institutions, free of duty.

A large stock of the principal FRENCH, ENGLISH and AMERICAN MILITARY AND ENGINEERING Works on hand.

## INVENTORS' EMPORIUM.

FOR SALE a number of valuable and useful patents, among which are the following: THE BUTTER MILL FOR FARMERS' CHURN, Scissors, Water Cask Gauge, Ironing Machine, Anti-Freezing Hydrant, Chair Lathe, Rope Machine, Corn Husker, Bureau-Bedstead, Anti-Freezing Lager Beer Keg, Gas Regulator, Automatic Pump, Anti-Friction Hinge Joint, Self-Calculating Scales.

Patents received for sale on commission. Patents applied for.

LEONARDO WESTBROOK,

122 Broadway, cor. Cedar St., NEW YORK.



# AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,  
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XVII., No. 2.]

SATURDAY, JANUARY 12, 1861.

[WHOLE No. 1,291, Vol. XXXIV.

Mr. FREDERIC ALGAR, No. 11 Clements Lane, Lombard Street, LONDON, is the authorized European Agent for the Journal.

## PRINCIPAL CONTENTS.

Boston and Lowell Railroad.....	25
New York State Banks.....	26
Toledo and Wabash Railroad.....	26
Collision: Inevitable Accidents: Running of Vessels in Fogs.....	27
Panama Railroad.....	28
Finances of Massachusetts.....	28
Share and Money Market.....	36
Cleveland and Pittsburg Railroad.....	37
Baltimore and Ohio Railroad.....	37
Finances of Missouri.....	38

## American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, January 12, 1861.

### Boston and Lowell Railroad.

The annual meeting of the stockholders of this company was held in Boston on the 2d inst. The report of the directors for the fiscal year ending September 30, 1860 was read. From this we learn that the receipts were:

From passengers.....	\$210,026 84
" freight.....	320,539 57
" mails and express.....	13,130 37
" rents.....	1,185 43

\$544,882 21

### And the expenses have been:

Repairs of road.....	\$70,767 54
" engines.....	23,605 76
" cars.....	24,439 00
" bridges.....	16,463 28
" depots, etc.....	19,691 44
Merchandise expenses.....	33,712 82
Wages.....	48,819 30
Taxes, insurances, etc.....	11,778 60
Fuel.....	35,305 06
Rents to other roads.....	39,316 20
Miscellaneous.....	35,367 81

\$60,266 81

Net earnings.....	\$184,615 40
Balance interest account.....	25,847 02

Net income.....\$158,768 38

The obligations of the Corporation to the holders of its Bonds, which will be payable in 1873, have been performed by the deposits of \$18,300

with the Trustee of the sinking fund, in accordance with the terms of the contract with them.

The present amount of that fund is \$89,550 41; to which will be added on the 31st December, a semi-annual deposit of \$9,150 and one year's accumulation of deposits.

The balance to credit of profit and loss 30th September, 1859, was.....\$354,239 00  
The net receipts from the traffic of the year, have been.....184,280 09  
The net receipts from other sources, have been.....1,185 43

\$539,704 52

During the year that account has been charged with am't of  
two dividends.....\$137,259 00  
Balance of interest acc't.....25,847 02  
Settlement with Concord and Montreal R. R. Co.....850 12

\$163,947 14

Leaving present balance to that acc't.....\$375,757 38  
From which is to be deducted the amount of dividend payable on the first day of January, 1861.....73,200 00

Surplus.....\$302,557 38

The whole debt of the Corporation on the 30th September, 1860, was as follows:

Bonds maturing in 1873.....\$440,000 00  
Unclaimed dividends, &c., &c.....3,863 50

\$443,863 50

The whole cost of the construction and equipment of Railroad has been.....\$2,428,592 79

Viz: Road.....\$ 925,702 38  
Rail iron.....266,308 46  
Woburn Branch.....39,365 50  
Depots.....1,004,578 20  
Engines and cars.....192,638 25

\$2,428,592 79

Since the last annual report, the directors have ordered two dividends of four per cent. each, one of which was paid in July last: the other of which will be payable on January 1, 1861.

The condition of the Corporation is as follows:

ASSETS.  
Cost of road, depots and equipment.....\$2,428,592 79  
Trustee of sinking fund.....89,550 41  
Notes receivable.....3,668 87  
Fuel, materials, &c.....82,194 85  
Cash.....52,814 37

\$2,656,821 29

## LIABILITIES.

Capital stock.....\$1,830,000 00  
Debt—bonds.....\$440,000 00  
Dividends, &c.....3,863 50—443,863 50  
Reserve, viz: Balance profit and loss.....\$375,757 38  
Balance accumulation sinking fund.....7,200 41

\$2,656,821 29

President—F. B. CROWNINSHIELD.

Directors—F. B. Crowninshield, George Lyman, J. C. Abbott, Isaac Hinckley, Wm. Minot, Jr.

Treasurer—J. THOMAS STEVENSON.

Manager—GEO. STARK.

Superintendent—J. B. WINSLOW.

## Grain Trade of Chicago.

From the elaborate annual review of the *Chicago Press*, we take the following, showing the imports and exports of Grain at that port during the last four years:

The total receipts of Flour and Grain during the past year, as will be seen from the tables which follow, amount to 36,504,772 bushels. The Grain alone foots up 33,004,742 bushels, which is more than double the receipts of 1859, and ten millions more that was ever received in this city in any previous year of our history.

The shipments during the past year amount in bushels to 31,459,697 bushels, of which 27,890,002 bushels were of Grain alone.

The following tables show the items separately, as compared with the figures of former years:

## TOTAL RECEIPTS OF FLOUR AND GRAIN FOR FOUR YEARS.

	1857.	1858.
Wheat, bush.....	10,554,761	9,761,326
Corn, bush.....	7,409,130	8,260,033
Oats, bush.....	1,707,245	2,295,322
Rye, bush.....	87,911	70,031
Barley, bush.....	127,689	411,421

Total.....19,886 636 20,798,233  
Flour into wheat.....1,969,679 2,624,757

Total.....21,856,206 23,422,708

	1859.	1860.
Wheat, bush.....	8,184,746	14,568,429
Corn, bush.....	5,410,003	15,487,966
Oats, bush.....	1,813,048	2,029,906
Rye, bush.....	228,179	295,436
Barley, bush.....	662,187	623,005

Total.....16,298,163 33,004,742

Flour into wheat.....3,710,060 8,500,038

Total.....20,008,223 36,504,772

## SHIPMENTS OF ALL KINDS OF GRAIN FOR THE PAST FOUR YEARS.

	1857.	1858.
Wheat, bush.....	9,485,052	8,727,838
Corn, bush.....	6,814,615	7,493,212
Oats, bush.....	416,778	1,498,184
Rye, bush.....	7,569	127,008
Barley, bush.....	17,993	127,008
Total.....	16,734,438	17,853,761
Flour into wheat.....	1,298,240	2,181,406
Total.....	18,032,678	20,035,166
	1858.	1860.
Wheat, bush.....	7,266,553	12,487,687
Corn, bush.....	4,127,654	13,943,172
Oats, bush.....	1,174,177	1,039,779
Rye, bush.....	131,449	129,156
Barley, bush.....	478,162	290,211
Total.....	13,178,995	27,890,002
Flour into wheat.....	3,484,800	3,566,695
Total.....	16,663,795	31,456,697

## New York State Banks.

The following table, from the report of the Superintendent of the Bank Department of this State, exhibits the amount of outstanding circulation issued to banking associations and individual bankers, and the amount and character of the securities deposited and held in trust for its redemption on the 30th day of September, 1860:

Outstanding circulation.....	\$28,841,416 00
SECURITIES.	
Bonds and mortgages.....	\$5,851,463 79
New York State stock—	
4½ per cent. ....	\$134,400 00
5 do. ....	7,431,969 01
5½ do. ....	937,000 00
6 do. ....	12,051,062 92
U. S. stock, 5 per ct.	\$2,919,000 00
Do. 6 do. ....	201,600 00
Arkansas State stock, 6 per cent..	142,000 00
Illinois State stock, 6 per cent....	410,250 00
Michigan State stock, 6 per cent....	41,000 00
Cash.....	75,726 40
Total.....	\$30,195,462 12

Aggregate of the securities held in trust for banking associations and individual bankers, Sept. 30th, 1859.....	\$28,068,336 92
Increase during the year, 1860.....	2,127,125 20
Amount of circulation outstanding Sept. 30, 1860.....	\$28,841,416 00
Am't of circulation Sept. 30, 1859, 26,490,682 00	
Increase for the year ending Sept. 30, 1860.....	\$2,350,734 90

The increase in the securities above noted, viz.....	\$2,127,125 20
has been in the following:	
New York State stock, \$1,292,886 00	
U. S. stock.....	1,256,500 00
	\$2,548,886 00

Less decrease in the following:	
Bonds and mortg'a. \$325,449 00	
Arkans. St. stock....	20,000 00
Illinois St. stock....	73,483 84
Cash.....	2,828 46
	421,750 80
	2,127,125 20

The aggregate amount of securities held for the circulating notes issued to the free banks of this

State, including cash, is \$30,195,462 12; upon which currency has been issued amounting to \$28,841,416. The Superintendent has no hesitation in saying that the currency of the free banks and bankers of this State never was better secured than at the present time, in the kind of securities held by the Department. The amount of bonds and mortgages held by the Bank Department on the 1st October, 1857, was \$7,856,281 59, while the amount on the 1st of October, 1860, was \$5,851,463 79, showing a decrease in that peculiar security of \$2,004,767 80. The Superintendent also holds in trust for the Buffalo Trust Company, \$100,000 in bonds and mortgages, and for the U. S. Trust Company, New York, \$100,000 in Auburn City stock, making the total amount of securities held in the Bank Department, on the 30th Sept., 1860, for all purposes, \$30,481,813 33, being an increase during the last fiscal year of \$2,156,110 38. The number of banks, banking associations, and individual bankers, actually doing business in this State on the 30th day of September last, was 306, and 37 were either closing their own affairs, or are insolvent, and their business is being closed by this Department, leaving 348 open bank accounts upon the books of this office. The entire emission of bank notes from the Bank Department, included that of incorporated banks, banking associations and individual bankers, is \$38,034,800, against \$36,581,276 in 1859, being an increase during the past fiscal year of \$1,453,524.

The absolute increase of the currency in actual circulation, of the banks of this State during the past fiscal year, has been \$3,788,159. The total outstanding circulation of the expired incorporated banks, on the 30th of September, 1859, was \$1,805,922. On the 30th September, 1860..... 1,563,595

Returned and destroyed during the year, \$242,327. The Superintendent expresses his confidence in the Banking law as it now stands, and states that it needs no amendment.

## Railroad Business at Detroit.

The aggregate earnings of the five Railroads centering in Detroit for two years, were as follows:

	1859-60.	1858-59.
Michigan Central R.R.	\$2,029,070.62	\$1,753,580.67
Mi'h. South. & N.I. R.R.	2,148,368.04	1,728,302.92
Detroit & Mil'kee R.R.	675,083.30	540,939.11
Great Western Railw.	2,112,100.80	1,897,659.78
Grand Trunk Railw'y.	3,288,850.15	2,395,861.75
Total.....	\$10,253,467.91	\$8,316,844.18
Increase.....		\$1,937,123.73
Per cent. of increase.....		23.15

## United States Mint.

The coinage of the Mint and Branch Mints of the United States for the last fiscal year is thus reported:

	Gold.	Silver.	Cents.	Total.
Phila..	\$4,854,577	\$867,076	\$842,000	\$553,653
Branches:				
N. O..	169,000	1,598,422	.....	1,767,422
S. Fra.	11,889,000	572,912	.....	12,461,912
Dah'a.	69,477	.....	.....	69,477
Char'e	133,697	.....	.....	133,697
N.Y....	6,831,532	222,226	.....	7,053,758
Total.....	\$28,447,282	3,250,636	\$42,000	\$27,039,919

The entire coinage and deposits have been as follows:

Dep'ts..	22,678,102	3,152,487	.....	25,825,689
Coin'e.	16,446,476	2,769,920	\$42,000	19,258,400
Bars...	7,001,875	480,716	.....	7,482,591
				27,039,919

## Toledo and Wabash Railroad.

The income of this road for the fiscal year ending Aug. 31, 1860, were:

From passengers.....	\$238,545 82
" freight.....	568,070 58
" mail.....	24,200 00
" express.....	15,773 62
" rent of cars and engines.....	6,579 59
" miscellaneous collections.....	811 87
Received on acc't of freight and mail transportation of previous year....	12,741 01
	\$861,722 44

Transportation expenses.....	\$406,939 01
Salaries of clerks.....	16,652 02
Taxes and insurance.....	17,185 68
Advertising and agencies.....	14,183 41
Legal expenses.....	6,644 17
Rent of cars and engines.....	7,484 94
Discount and exchange.....	4,787 05
Commissioners.....	4,087 07
Miscellaneous expenses.....	9,987 08
	487,950 43

Net income.....	\$378,772 01
The earnings this year were.....	\$848,981 43
Last year they were.....	762,508 24

An increase of.....	\$86,473 19
The expenses this year were.....	\$487,950 43
Last year they were.....	438,711 07
	49,239 36

Making the increase of net earnings... \$37,233 83

The present capital of the Toledo and Wabash Railway Company, combining the general and preferred stock, the funded and other permanent obligations, and which primarily represent the cost of the railway and equipment of the company, amounts to \$8,019,539 37. The general stock consists of 26,629 shares of \$50 each, amounting to \$1,331,450, and the preferred stock consists of 15,841 shares of \$50 each, amounting to \$972,050, making the aggregate of stock capital \$2,123,500. The funded obligations of the company consist of \$3,400,000 First Mortgage Bonds and \$2,500,000 Second Mortgage Bonds, both of which issues are secured by mortgages executed in accordance with the laws of the State of Ohio and Indiana, into or through which the road extends, and under whose laws the company derive their corporate franchises, and they constitute the only mortgage liens now existing upon the road.

The remaining element of capital liability comprises the funded and unfunded coupons, numbers eight and nine originally attached to the First Mortgage Bonds. These coupons matured prior to the inception of this company, but it was provided and made a condition precedent to its organization that they should be redeemed and permanently merged into the funded notes of the company, and accordingly the liability so created has become an integral part of the capital of the company. The notes issued for the redemption and funding of these coupons bear dates Nov. 1, 1858, and March 1, 1859, bearing 7 per cent. interest, and the principal thereof is made payable in the city of New York in five equal instalments, commencing on the 1st day of November, 1860. The total amount of these funded notes thus far issued is \$96,049 88, leaving of said coupons still outstanding and unredeemed with interest, \$52,889 49.

A summary of the foregoing liabilities amounting in the aggregate to \$8,019,539 37, and constituting the total capital of the company, is given in the annexed balance sheet.



During the fiscal year there have been transported over the road 3,000,000 bushels of grain and 114,000 barrels of flour, as against 687,000 bushels of grain and 82,000 barrels of flour for the preceding year.

**RESIDUARY INCOME BALANCE—Construction, Equipment, and Interest Department for fiscal year ending Aug. 31, 1860.**

	Dr.	
To interest account.....	\$288,641	61
To land and damages.....	4,556	86
To T.W. & W.R.R. Co., old contracts.....	3,788	38
To profit and loss, discount on Q. & T. and Q. & P. R. R. bonds.....	20,400	00
To amount paid from income on account of construction and equip'm't.....	33,571	84
To balance of income account of preceding year.....	96,220	98

Total.....\$547,479 12  
To balance of account brought down.....\$175,707 11

	Cr.	
By amount of balance of net income account brought down.....	\$373,772	01
By balance of account carried down.....	173,707	11

Total.....\$547,479 13  
**TREASURER'S GENERAL BALANCE—Aug. 31, 1860.**

	Dr.	
To road bed and equipment.....	\$8,019,539	37
To general post-office department.....	3,933	33
To bills receivable.....	3,208	19
To Toledo, Logansport and Burlington Railroad Company.....	11,612	94
To Quincy and Toledo R. R. bonds.....	6,000	00
To suspended interest account.....	175,000	00
To farmer's loan and trust company amount on deposit for payment of coupons.....	71,978	18
To western agency.....	36,968	58
Balance of income account brought forward.....	173,707	11

Total.....\$8,498,947 70

	Cr.	
By general stock.....	\$1,331,450	00
By preferred stock.....	792,050	00
By 1st mortgage bonds.....	3,400,000	00
By 2nd ".....	\$2,500,000	
Less amount not issued.....	152,400-2,347,600	00
By 1st mortgage coupons funded.....	96,049	88
By " unfunded.....	52,389	49
By bills payable.....	14,034	57
By coupons of—		
Feb. 1, 1859, 1st mortgage bonds.....	525	00
May 1, 1859, 2d ".....	5,451	25
Aug " 1st ".....	2,765	00
Nov. " 2d ".....	87,500	00
Feb. 1, 1860, 1st ".....	119,100	00
May " 2d ".....	87,500	00
Aug. " 1st ".....	119,000	00
By cash account.....	43,632	51

Total.....\$8,498,947 70

**Debt of Pennsylvania.**

The funded debt of Pennsylvania on the first day of December, 1860, was \$37,849,125, which, with \$120,721 of unfunded debt, makes the entire public debt of Pennsylvania at this time \$37,969,847, against \$38,638,961 at the beginning of the last fiscal year—showing a reduction of 669,114. The direct reduction of public debt during the three years of Gov. Packer's administration \$1,911,890. The balance in the Treasury on the first of December, was \$681,433, an excess of the balance at the beginning of the fiscal year 1857 of \$153,326. If to this sum is added \$171,664 paid on account of claims growing out of the construction and maintenance of the public improvements, we have an aggregate of \$324,991, which, if added to the payments on account of the public debt, makes a diminution of actual indebtedness during the three years of \$2,236,890. Beside the ordinary sources of revenue, the Commonwealth holds in the bonds of the Pennsylvania

Railroad Company \$7,200,000; of the Sunbury and Erie Railroad Company \$3,500,000, and of the Wyoming Canal Company \$281,000—making an aggregate of \$10,981,000, which, deducted from the public debt, reduces it to about \$27,000,000. The interest on the Sunbury and Erie bonds is unpaid.

**Journal of Railroad Law.**

**COLLISION: INEVITABLE ACCIDENT: RUNNING OF VESSELS IN FOGS.**

The case of the Amoskeag Manufacturing Co. vs. The Steam Ferry Boat John Adams, has been recently decided by the United States Circuit Court, Massachusetts. The learned Justice, in the opinion, goes quite at length in the consideration of the mutual duties required of vessels navigating in foggy weather; and also into what constitutes an inevitable accident, that in the eye of the law will exonerate parties from blame and liability for injuries that may be sustained from them.

The libel sets forth that in January 1859, the ship Aldenah, laden with 960 bales of cotton, was lying properly moored at Battery wharf Boston, where she was carelessly run into by the ferry boat John Adams, and among other damages the stern post of the ship was started and the wood ends forced open, causing her to leak to such an extent that the cotton on board belonging to the libellants was wet and thereby greatly damaged, for which the libellants claim that the respondents should indemnify them.

The respondents denied that the ship was properly moored, admitted that during a dense fog the steamer did run into a ship lying at said wharf, but expressly denied that it was the result of any carelessness or negligence on their part. They also claimed that they exercised proper precautions such as sounding their whistle, proceeding at a slow rate and with great care, stopping, placing a man on the look-out, &c. They also averred that at the time of the collision they were lost in the fog, and had been carried from their course by the tide during their stoppage, that at the time of the collision they were borne chiefly by the force of the tide which was running very rapidly, their machinery not being in motion, and that therefore they should not be held liable for an accident which was inevitable.

Upon this state of facts the Court decided that the libellants were entitled to recover. The following is the opinion of the Court upon the question as to whether or not the accident was inevitable.

CLIFFORD, J.—The main ground of defence in this case is that the accident was inevitable. The fact, time, place, and substantially the manner of the collision are not controverted. According to the testimony she was properly and securely moored and fastened to the wharf. The steamer left the slip on the eastern side at about 8 o'clock A. M.

At the time of starting the fog did not rest upon the water by 6 or 8 feet, but very soon after she left it shut down and became exceedingly dense. Orders were then given to "slow," and when about half way across, to reverse the engines so as to stop; and the steamer was stopped. After remaining stationary some three or four minutes, she was started again under a slow bell, and after the engine had made some three or four revolutions the signal was again given to stop, and almost immediately after to reverse, but before a

single reverse revolution could be made the collision occurred. During this time the master was in the pilot house, 28 feet above the level of the water, and so dense was the fog that he could only see the "glimmer" of men on the deck of the steamer. The whole crew consisted of the master, engineer, firemen and two deck hands. One deck hand was stationed forward as a look-out, and was assisted by many of the passengers who stood forward. Very discrepant estimates are made by different witnesses as to the distance at which objects were visible through the fog—the estimates varying from 5 or 6 to 150 or 200 feet. It is worthy of remark that the witnesses for the respondents testify that they did not see the ship until the steamer was within from 6 to 20 feet of her, while witnesses for the libellants testify that they did see the approaching steamer at a distance of from 150 to 200 feet. Greater weight should certainly be given to the positive knowledge of some witnesses than to the mere opinion of others.

At all events I am of the opinion, after a careful review of the evidence, that the density of the fog was not such that the collision might not have been prevented if the look-out of the steamer had performed his duty. Very little reliance is to be placed in passengers as look-outs, and they cannot be regarded as answering the requirements of a look-out under the maritime law. Every steamer traveling in the thoroughfares of commerce ought to have a constant and trustworthy look-out. According to his own statement the look-out of this steamer did not see the ship until within 5 or 6 feet of her. The owners of the steamer are equally liable, whether his failure to perform his duty arose from inattention or incompetency. The whole testimony goes to show that the master exercised less care than he ought to have done.

The speed of the steamer is also variously estimated at from 1 to 4 miles per hour.

The consequences of the disaster go very far to show that the latter is the correct estimate. The steamer cannot be excused on the ground of inevitable accident, which the evidence falls so far short of establishing that it is hardly worth while to consider the law upon that subject. According to Dr. Lushington, strictly inevitable accidents seldom occur, and the word inevitable is to be construed reasonably and according to the circumstances of the case; an inevitable accident means a collision which occurs when both parties have endeavored by every means in their power with due care and caution and a proper display of nautical skill to prevent the accident, and he held it to be clear that *prima facie* the *onus probandi* is on the owners of the moving vessel, and they can only exonerate themselves by showing that the blame did not lay at all with the vessel or rested solely on the pilot. Even though a vessel were at anchor or moored in an improper place, every possible precaution, consistent with its own safety, must be taken by the moving vessel to avoid collision. The libellants having shown that their vessel was in a proper place and the fact of a collision, the burden of proof is on the respondents to show that it was not their fault or was the fault of the complainants. Ferry boats crossing the harbor of a commercial port in a dense fog by day, or in the darkness of night, should proceed with the greatest care, and if they lose their bearings, they should come to anchor,

and if they rashly advance, the owners must take the consequences of accidents. Three or four knots per hour was too rapid motion under such circumstances as these. The steamer had no right to proceed at such a rate as to endanger the property of others. The defence of inevitable accident is, therefore, not sustained.

#### Panama Railroad.

Below we give the statement of this company of its operations for the year ending December 31, 1860.

The receipts for the year, compared with those for 1859, have been as follows:

	1860.	1859.
For passengers.....	\$688,879	\$1,068,832
For freight, merchandise (including baggage)....	618,578	556,641
For freight treasure.....	128,946	153,877
For mail transportation...	50,000	100,000
For miscellaneous, wharf- age, light money, inter- est, etc.....	14,973	6,095
For earnings uncollected, or for which returns have not been received, esti- mated.....	50,000	40,000
Balances from previous years.....	517,919	535,109

Totals.....2,068,792 \$2,460,554

The net earnings have been applied as follows:

Interest on sterling bonds (£540,000) with exchange and commission...	\$186,468 45
Interest on convertible bonds, \$24,000 at 7 per cent.....	1,680 00
Running expenses, including materi- als, repairs, subsistences, labor, etc.....	406,050 55
Equipment account— New cars, etc.....	\$17,019 32
Permanent improvements, paid for out of income acc't, construction be- ing closed.	
New wharves.....	\$20,072 13
Water works.....	15,204 16
Dredging machine.....	18,489 96
Stone breakers and engines	5,000 00
Office expenses.....	75,785 57
New Granadian Government—Propor- tion mail receipts.....	22,904 73
	10,000 00

Total.....\$702,889 00

Balance applicable to dividends...\$1,365,902 00  
which has been applied as follows:

Dividend, No. 16, paid July 2, 1860, 6 per cent.....	\$298,560 00
Dividend, No. 17, payable Jan. 2d, 1861, 6 per cent.....	298,560 00
New-Granadian Government.....	17,973 60
Paid Trustees sinking fund.....	100,000 06

Total.....\$715,093 60

Surplus remaining.....650,809 20  
The gross and net earnings and dividends paid  
by this company since the opening of its road  
have been as follows:

	Gross receipts.	Net receipts.	Divi- dends.	Rates.
1852....	\$298,629	\$224,636	\$151,175	10
1853....	416,598	302,648	210,928	8½
1854....	545,928	429,386	205,808	7
1855....	1,112,747	819,673	496,600	12
1856....	1,439,976	1,083,922	585,060	12
1857....	1,377,363	906,726	594,331	12
1858....	1,524,704	1,052,196	611,202	12
1859....	1,971,878	1,479,847	614,292	12
1860....	1,550,876	1,036,131	615,093	12

Total \$10,232,694 \$7,335,163 \$4,088,887

This exhibit which covers the whole period of

the operations of the company is certainly a favor-  
able one.

#### GENERAL STATEMENT.

##### Assets.

Construction account.....	\$8,000,000 00
Cash in Bank.....	204,920 52
Loans on demand.....	127,455 75
Am'ts due from agents and others, Cavan, Brothers & Co., London....	93,093 52
Sinking Fund.....	49,557 31
Real estate, on the Isthmus and Is- land in the Bay of Panama.....	50,369 06
Stock North Atlantic Steamship Co.	69,431 97
Steamer Guatemala (cost \$155,000) valued at.....	500,000 00
Steamer Columbus (cost \$50,500), valued at.....	180,000 00
Steamtugs and launches in Bay of Panama (cost \$50,500), valued at.....	25,000 00
Interest in sailing vessels (cost \$41- 000), valued at.....	25,000 00
	28,000 00
Total.....	\$9,302,828 13

##### Liabilities.

Capital stock.....	\$4,976,000 00
Sterling bonds, with exchange....	2,466,237 78
Convertible bonds.....	24,000 00
Book accounts.....	44,900 60
Dividend declared and payable Jan. 2d, with N. G. Government, propo- rtion.....	307,546 80
Trustees sinking fund, appropriation not invested.....	50,000 00
Undivided earnings from road.....	\$650,809 20
Undivided earnings of sailing vessels, tugs & launches (after de- ducting depreciation.....	183,333 75
Undivided earnings of bonds redeemed.....	600,000 00
	1,434,142 95
	\$9,302,828 13

#### Finances of Massachusetts.

We give herewith a statement of the financial  
condition of the State of Massachusetts at the  
close of 1860.

##### Liabilities on account of Railroad Companies.

Western Railroad Corporation.....	\$3,999,555 56
Eastern do. do.....	500,000 00
Norwich do. do.....	400,000 00
Southern Vermont R. R. Corporation	200,000 00
Troy & Greenfield do.....	427,672 00

\$5,526,127 56

##### OTHER LIABILITIES.

Lunatic Hospital:—	
1852, due 1865.....	\$100,000 00
1853, " 1865.....	70,000 00
1854, " 1874.....	94,000 00
	\$264,000 00

State Almshouse:—	
1852, due 1872.....	\$100,000 00
1853, " 1873.....	60,000 00
1854, " 1874.....	50,000 00
	210,000 00

State House:—	
1853, due 1873.....	\$65,000 00
1854, " 1874.....	100,000 00
	165,000 00

Six per cent. :—	
1856, due 1862.....	\$100,000 00
1856, " 1864.....	100,000 00
1856, " 1866.....	100,000 00
	300,000 00

Lunatic Hospital:—	
1857, due 1868.....	\$150,000 00
1857, " 1877.....	50,000 00
	200,000 00

Convertible State's:—	
1860, due 1870.....	150,000 00

\$6,815,127 86

Total liabilities.....	\$6,815,127 86
Temp. Loans due Jan. 1, 1860.....	\$246,429 77
Reduced by scrip, 1860.....	150,000 00

\$96,429 77

Estimat'd deficit for 1860.....	170,000 00
	266,429 77
	\$7,081,557 33

##### ASSETS.

Mortgage Western Railroad Co....	\$3,999,555 56
Sinking fund Western Railroad....	1,600,000 00
Mortgage Eastern Railroad.....	500,000 00
Mortgage Nor. & Worcester R. R....	400,000 00
Sinking fund Norwich & Worcester Railroad.....	66,000 00
Troy and Greenfield Railroad entire property.....	427,572 00
Sinking fund, Troy & Greenf'd R.R.	20,000 00
Southern Vermont Railroad Com- pany's entire property.....	200,000 00

\$7,213,127 66

Debt ext'm't fund, 7,056	
West'n R.R. st'k, par \$705,600 00	
Present value, prem. 10	
per cent.....	70,560 00
Western R.R. stock f'd.....	115,500 00

\$891,660 00

Less am't advanced on these securities.....	46,000 00
--	-----------

\$845,660 00

Back Bay land fund ap- propriated.....	300,000 00
Almshouse sinking f'd.....	58,548 00

1,199,208 00

\$9,412,335 66

Payments for 1860 am't to about.....	\$1,185,000 00
Receiv'ts for 1860 am't to about.....	1,015,000 00

Deficit.....\$170,000 00

The estimated expenses of the ensuing year will  
be considerably less than the present, and unless  
some extraordinary emergency arises, the revenue  
will more nearly equal the expenditures.

Expenditures for 1861, estimate.....	\$870,000 00
Revenue, including unpaid tax 1860.....	760,000 00

Deficit, 1860.....\$110,000 00

Deficit previous years.....267,000 00

To be prov'd for by tax or otherwise \$377,000 00

The fiscal year closes on the 31st of December,  
and therefore the statements given are only an  
approximation to the actual results, which may  
vary somewhat the above.

#### THE VALUATION OF THE COMMONWEALTH.

The Legislative Committee appointed to compute  
the valuation of the Commonwealth as a basis for  
State taxation during the next ten years, has re-  
cently concluded its labors after a session which  
was protracted to a length of more than a hundred  
days, beginning September 5, 1860, and ending  
January 1, 1861, at a cost of \$13,191 50 for the  
pay of its members, and \$6,322 for contingent ex-  
penses. The aggregate valuation of taxable prop-  
erty is computed at the sum of \$897,796,326,  
which is \$299,858,330 more than the State valua-  
tion of 1850, exhibiting an increase of about 50  
per cent. In the wealth of the State during the last  
ten years. When it is remembered that consider-  
able sums (in the hands especially of small prop-  
erty holders, of which deposits in the Savings  
Banks, not exceeding \$500 each, may be taken as  
an illustration) have been omitted from the assess-  
ments, the result discloses that the wealth of the  
people of Massachusetts averages not less than  
\$750 to each inhabitant, irrespective of age or sex.  
The proportionate distribution of this wealth  
among the people is illustrated by the fact that



the amount of deposits in the Savings Institutions in the Commonwealth on the fourth Saturday of October last, as shown by the annual report of the Bank Commissioners, was \$45,054,235, although these institutions are prohibited by statute from holding at the same time more than \$1,000 of one depositor other than a religious or charitable corporation; and these deposits represent only a fraction of the savings from the daily industry of the working classes. The policy of encouraging families to become land owners, by exempting their homesteads to the value of \$800 from seizure on execution, has helped to preserve their accumulation; and the numerous modes in which small savings are invested by private loans and friendly accommodation, help largely to increase and to preserve their aggregate.

The industrial statistics of the Commonwealth are compiled but once in ten years. The last compilation was in 1855, when it appeared that the annual production from the industry of Massachusetts amounted to \$295,820,681, which was an increase of 138 per cent. over the amount exhibited by the last previous compilation; nor can it be doubted that the productive capacity of our people since 1855 has kept pace with the gratifying increase of their capital. A Commonwealth of 1,231,535 persons, or an area of only 7,800 square miles, with a property of nearly \$900,000,000, whose people are all free, and whose poorest child may be educated in the free schools of the State, is a noble monument of the triumphs of intelligence and liberty.

In this connection I respectfully recommend to the General Court to provide some less expensive and cumbersome method for ascertaining the valuation of the State, than that which has hitherto been pursued. The details of a more economical and efficient plan will be suggested if it shall be deemed desirable.

#### Railroad Earnings.

The receipts of the Toledo and Wabash Railroad for December were:

	1859.	1860.
Passengers.....	\$17,165 57	\$16,986 85
Freight.....	29,929 58	34,309 05

Total.....\$46,095 10 \$51,295 40

The earnings for the four months ending Dec. 31st show the following result:

	1859.	1860.
Passengers.....	\$80,527 57	\$91,127 02
Freight.....	196,988 44	268,894 88

Total.....\$297,516 01 \$360,021 90

Increase.....\$82,705 89

The earnings of the St. Louis, Alton and Chicago Railroad in December were:—

Passengers.....	\$25,516 10
Freight.....	36,166 92
Mails and express.....	8,343 88

Total.....\$65,026 85

Corresponding period in 1859.....61,051 00

Increase in 1860.....\$3,975 35

The Michigan Central Railroad earned in December, 1859.....\$132,948 84  
1860.....129,022 26

Decrease.....\$3,926 58

The earnings of the Hudson River Railroad for December, 1860, were.....\$220,817 19  
December, 1859.....232,032 64

Decrease.....\$11,662 45

Navigation remained open five days longer this year than last. The December earnings for three years were:

1858.....	\$197,980 14
1859.....	232,032 64
1860.....	220,870 19

The earnings of the Illinois Central Railroad for December were \$227,309.99, against \$198,285.85; the sales of land, \$151,114.12; the cash collected, \$80,976.07. For the last quarter of 1859 and 1860 the comparative statement is:

	1859.	1860.
Traffic.....	\$682,919 04	\$791,198 52
Sales of land.....	77,894 24	632,049 05
Cash collected.....	172,027 38	321,279 12
Total.....	\$932,840 66	\$1,744,526 69
Increase.....		\$812,186 03

The earnings of the New York Central Railroad for December, 1860, were.....\$522,918 85  
1859.....520,396 27

Increase.....\$2,522 58

The eighth monthly report of the Receiver of the Ohio and Mississippi Railroad Company, for November, 1860, is as follows:

Balance from October.....\$17,487 26

#### RECEIPTS.

From express freight of Oct.....	\$2,075 45
" passengers prior to Nov.....	5,273 16
" freight.....	4,477 40
" passengers on Nov. acc't.....	34,195 94
" freight.....	26,985 41
Other sources.....	61,181 85
	3,649 43
	\$94,149 05

#### DISBURSEMENTS.

Paid charges advanced in account with other roads.....	\$5,434 10
Paid interest and discounts.....	565 78
Paid office and other expenses.....	427 60
Paid first mortgage coupons, due July 1, 1858.....	70 00
Paid first mortgage coupons, due Jan. 1, 1859.....	70 00
Paid first mortgage coupons, due July 1, 1859.....	70 00
Paid first mortgage coupons, due July 1, 1860.....	12,005 00
Paid on account of November current expenses.....	3,074 55
Paid on account of former arrearages.....	4,902 18
Paid on account of October current expenses and construction work.....	63,202 61
	89,821 75
Balance carried to December account.....	\$4,327 30

The receipts of the Grand Trunk Railway of Canada for the week ending Dec. 29, were.....\$60,805 49

Week ending Dec. 31, 1859.....53,777 11

Increase in 1860.....\$7,028 38

Total traffic from July 1st, 1860.....\$1,786,180 68

Corresponding week 1859.....1,362,463 31

Increase.....\$423,717 37

The receipts of the Chicago and Northwestern Railroad in December, 1860, were.....\$56,888 88

December, 1859.....42,061 59

Increase.....\$14,826 74

The earnings of the Chicago, Burlington and Quincy Railroad Line in the month of December were:

	1859.	1860.
Freight.....	\$79,044 09	\$79,230 00
Passengers.....	38,781 95	35,336 05
Mails, etc.....	10,209 49	8,041 67
Total.....	\$128,035 53	\$117,607 72
Decrease.....		\$10,427 81

The following is the Illinois Central Railroad Company's statement for December, 1860:

#### Land Department.

11,070.85 acres sold for.....	\$151,168 12
71,287.22 do. during year, 1,137,647 40	
1,237,260.55 do. previously.....	15,735,837 02

1,308,647.77 Total.....16,873,384 42

Construction Bonds canceled in December, 1860.....\$44,500 00

Construction Bonds canceled previously.....1,727,000 00

Total bonds canceled.....\$1,771,500 00

Total cash receipts in December.....84,331 30

Total cash and bonds received during year.....780,097 87

Total cash and bonds received to Dec. 31, 1860.....4,195,398 02

#### Traffic Department.

Total receipts for December, 1860.....\$227,858 24

Do. 1859.....198,285 85

Increase.....\$29,572 89

Traffic for year 1860.....\$2,725,939 35

Do. 1859.....2,114,448 98

Increase.....\$611,490 87

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The Cleveland and Toledo Railroad earned in December, 1859.....\$82,219

1860.....82,589

Increase.....\$370

The earnings of the Galena and Chicago Railroad for December, 1860, were.....\$39,770 06

Same month, 1859.....89,343 61

Increase.....\$426 45

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

The earnings of the Buffalo, New York and Erie Railroad (Corning to Buffalo), for December, 1860, were.....\$37,520 23

December, 1859.....45,221 29

Decrease.....\$7,701 06

#### Pondrous Iron Beams.

The machinery of the Phoenix Iron Company is now so powerful that they can roll the largest beams ever made in the United States. They have already rolled a number for the West Point Foundry Company, each beam being twelve inches deep, four inches wide on the top and bottom flanges, weighing 120 pounds to the yard, and being 21 feet long. Lengths of 40 feet may, however be made with the same facility.

## RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (\*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				
	Main Line.	Lateral and Branch Lines.	2nd Track and Siding.	Road in progress or projected.	Engines.	Cars.			Property and Assets.					Liabilities.					Gross.	Net.	Dividends.	Price of shares.	
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.						
M.	M.	M.	M.	No.	No.	No.																	
ALABAMA.																							
30 Jun. '60	65.0			50.6			Alabama and Florida	1,451,336	*		877,953	503,500	105,265	1,515,704	54.0		101,102	37,866					
23 Feb. '59	30.3			58.1	2	2	19	Alabama and Mississippi	461,505	30,961		335,010	109,500	21,632	518,965	30.3		55,791	31,852				
31 May '60	109.6			67.8	11	9	102	Ala. and Tennessee Rivers	2,261,927	184,906		1,067,006	777,777	240,485	2,476,023	109.6		207,626	111,232				
30 Jun. '59	57.0			171.3				Mobile and Girard	1,600,000	*						57.0	236,701	76,773	21,006				
1 Apr. '60				67.2				Mobile and Great Northern	84,230			36,645	79,664		116,310								
31 Dec. '59	349.9	13.5		168.5	25	18	361	Mobile and Ohio	7,853,467	882,129	114,894	3,481,791	4,717,497	858,467	12,447,373	328.0	585,543	1,120,588	651,610				
29 Feb. '60	88.6	23.4			23	14	283	Montgomery and West Point	1,838,718	427,265	100,000	1,419,769	922,622	23,579	2,582,505	116.9		505,156	260,269	6			
6 Dec. '59				209.5				North East and South West	600,000	*		650,000			1,030,957								
ARKANSAS.																							
30 Nov. '58	38.6			301.4				Cairo and Fulton		*		361,524	446,000	10,725	811,949								
				107.6				Memphis and Little Rock	553,877	*													
CALIFORNIA.																							
30 Dec. '59	22.5							Sacramento Valley	1,571,617	*		785,950	729,000		1,585,366	22.5		270,293	143,787				
CONNECTICUT.																							
1 Aug. '59	23.9		1.9		3	4	34	Danbury and Norwalk	335,842	50,873		279,100	85,000	4,600	408,597	23.9		73,826	27,992	6			
30 Sep. '59	122.4		10.8		16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511		1,936,739	1,810,500	319,444	4,323,922	122.4		333,500	152,777				
31 Aug. '59	61.4	10.6	64.6		18	21	302	Hartford and New Haven	3,170,747	254,000	102,889	2,350,000	904,000	16,463	3,932,432	72.4		844,772	502,579	10	135		
31 Dec. '59	74.0				11	11	240	Housatonic	2,439,776			2,000,000	232,000	96,730	3,932,432	120.0		239,860	55,227				
31 Dec. '59	57.0		2.3		7	11	182	Naugatuck	1,370,958	207,343	7,000	1,031,800	287,350	29,041	1,695,018	62.0		241,330	127,505	3			
31 Dec. '59	61.0		3.0					N. Haven, N. London and Ston.	1,851,879			960,748	866,000	200,000		61.0		107,837	20,627				
31 Dec. '59	46.0	9.0	7.0					New Haven and Northampton	1,400,000	*		922,500	700,000		59.7		90,362	90,362	5				
31 Oct. '59	66.0		6.0		7	5	106	New London Northern	1,568,695			610,900	1,052,500	3,872	1,575,147	66.0		119,146					
31 Mar. '59	61.3	1.0	63.8		29	72	368	New York and New Haven	4,063,222	661,546		2,980,839	2,219,000		5,682,431	117.4	432,024	828,692	283,333	3			
30 Nov. '59	66.0		8.5		14	17	282	Norwich and Worcester	2,493,983	149,711		2,122,500	714,998	14,079	2,851,577	66.0		351,699	139,365			40	
DELAWARE.																							
31 Oct. '59	84.0		10.0					Delaware	1,547,825	*		361,478	931,500	112,029	1,547,825	84.0			75,672				
31 Oct. '59	16.2							Newcastle and Frenchtown	723,551			744,520		4,641	749,171	5.0		21,195		6			
FLORIDA.																							
30 Apr. '60	154.2				3	1	6	Florida		*		191,485	195,000	75,894	619,112	32.0		7,857	3,535				
30 Jun. '59	31.3		2.0	28.6	2	1	24	Flo., Atlantic and Gulf Central	396,310	25,608		205,781	204,600	164,670	594,836	19.3		10,255	1,504				
30 Jun. '59	26.5	3.9		227.0				Pensacola and Georgia							29.4								
GEORGIA.																							
30 Jun. '60	86.7				16	7	124	Atlanta and West Point	1,192,389	*		1,250,000	126,000		1,597,386	86.7		418,036	265,827	8	125		
30 Jun. '60	30.0			133.5				Atlantic and Gulf—M. Trunk								30.0							
31 Dec. '57	53.0							Augusta and Savannah	1,032,200	*		733,700	298,500		1,032,200	53.0		125,427	69,679				
30 Apr. '59	43.5			23.7				Brunswick and Florida	755,000			151,887			61.0								
30 Nov. '59	191.0				54	28	636	Central of Georgia	3,750,000		826,171	3,750,000	106,267		5,977,106	191.0	790,030	1,633,497	839,604	10			
31 Mar. '59	171.0	61.0						Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000		7,363,665	232.0		1,154,621	644,363	5	100		
30 Nov. '59	102.5				18	16	171	Macon and Western	1,500,000			1,438,800	23,000	7,101	1,967,776	102.5	213,180	375,250	209,785	11	109		
31 July '59	65.0				7	2	107	Muscogee	774,244	162,534		669,950	249,000		1,026,868	60.0		202,714					
1 May '58	65.1				3	4	33	Savannah, Albany and Gulf	1,386,634	62,373		1,275,901	10,200	180,621	1,473,140	71.6							
31 July '60	104.1	100.8	16.2		18	20	201	South Western	3,770,425	*		2,921,900	396,500	19,913	3,822,913	228.8		883,853		13			
30 Sep. '59	138.0				52	24	705	Western and Atlantic	5,901,497	*		built and owned by State.			138.0			832,343	454,541				
ILLINOIS.																							
30 Apr. '60	138.0		26.0		62	31	990	Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000		10,000,000	220.0							
31 Dec. '58	45.0				6	14	101	Chic., Burlington and Quincy	6,067,923	1,400,998	711,359	4,631,540	3,158,000	179,090	8,701,825	210.0		1,233,708	453,141			67	
1 Apr. '60	194.0							Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,232	135,284				
30 Jun. '60	181.8				58	57	960	Chicago and Northwestern	9,344,863			2,000,000	7,369,034	76,329	9,344,863	194.0	10 mo.	844,656	139,522				
10 Nov. '58	33.2							Chicago and Rock Island	6,913,554	*	115,235	6,603,000	1,397,000		7,473,049	223.4		1,063,934	309,567	3	65		
31 Dec. '58	121.0	138.5	73.6		60	63	1,369	Fox River Valley	580,000			580,000			84.0								
31 Dec. '58	121.0	138.5	73.6					Galena and Chicago Union	8,027,473	1,311,917	211,003	6,026,400	3,783,015	292,466	10,300,517	326.5	808,281	1,547,561	620,328	4	63		
31 Dec. '58	176.0							Great Western	6,022,928	*		1,600,000	3,088,426	334,500	5,022,928	176.0							
31 Dec. '58	454.8	252.5			113	96	2,305	Illinois Central	19,674,214	3,347,790		10,249,210	20,000,000	1,297,277	31,596,487	708.3		1,976,578	556,624			75	
31 Dec. '58	148.0							Illinois River	4,970,586	*		1,780,295	3,292,408		148.0								
31 Dec. '58	46.6							Ohio and Mississippi							oper	by Chic.							
31 Dec. '58	184.0							Peoria and Bureau Valley							oper	by Chic.							
31 Dec. '58	100.0							Peoria and Hannibal							oper	by Chic.							
31 Dec. '58	100.0							Peoria and Oquawka	1,400,000	*		1,569,889	2,200,000		186.0								
31 Dec. '58	100.0							Quincy and Chicago	1,975,555	*		800,000	1,200,000		2,000,000	100.0							
31 Dec. '58	168.5	39.8	12.2		31	30	424	Rock Island Bridge				8,026,903	6,035,615	741,040	8,865,232	208.3							
31 Dec. '58	168.5	39.8	12.2					Terre Haute, Alton & St. Louis	7,098,958	628,487													
INDIANA.																							
30 Jun. '59	1086.																						



## RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (\*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "Italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Gross.	Net.	Dividends.					
						Passenger.	Freight, etc.		Railroad and appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance Total, incl. all other assets and liabilities.				Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.			
M.	M.	M.	M.	No.	No.	No.																	
MAINE.																							
30 Nov. '59	36.5	—	—	—	4	4	21	Androscoggin	757,381	*	—	151,833	444,638	160,910	757,381	36.5	—	40,155	24,676	—	—	—	
31 May, '59	55.0	—	—	—	9	10	128	Androscoggin and Kennebec	2,210,947	*	27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,186	281,929	89,706	—	—	—	
30 Jun. '59	149.0	—	25.0	—	41	17	349	Atlantic and St. Lawrence	6,066,375	857,566	—	2,494,900	3,472,000	9,572	9,976,472	149.0	429,791	545,741	150,226	6	—	—	
30 Jun. '59	12.5	—	2.0	—	4	3	45	Bangor, Oldtown and Milford	244,726	—	—	135,000	—	40,576	244,726	12.5	—	30,830	—	—	—	—	
31 Aug. '59	63.0	9.5	8.0	—	12	11	120	Kennebec and Portland	2,871,264	*	—	1,287,779	1,280,000	271,143	2,990,998	72.5	—	164,516	81,696	—	—	—	
31 Dec. '59	—	—	—	14.0	—	—	—	Penobscot	328,412	—	—	180,497	300,000	—	75,000	—	—	—	—	—	—	—	
31 May, '59	54.7	—	—	—	4	10	95	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by An. & K.	67,324	—	—	—	—	
31 May, '59	51.3	—	—	—	11	13	118	Portland, Saco and Portsmouth	1,494,792	—	5,208	1,500,000	—	—	1,500,000	51.3	141,664	208,299	104,029	6	97		
31 May, '59	37.0	—	—	—	—	—	—	Somerset and Kennebec	783,763	*	—	169,200	556,600	—	—	—	—	55,408	28,404	—	—	—	
31 May, '59	18.5	—	—	—	33.5	—	—	York and Oumberland	1,090,000	—	—	370,000	450,000	270,000	1,090,000	18.5	—	—	—	—	—	—	
MARYLAND.																							
30 Sep. '59	279.6	7.2	—	—	235	124	3,272	Baltimore and Ohio	21,225,164	3,576,251	3,606,740	10,111,800	13,881,833	292,426	30,278,377	296.8	3,648,814	3,618,618	1,933,621	6	58 1/2		
30 Sep. '59	30.0	—	—	—	7	33	167	Washington Branch	1,650,000	—	—	1,650,000	—	—	1,650,000	30.0	187,427	442,219	268,540	6	100		
31 Dec. '59	138.0	4.0	14.5	—	41	39	1,748	Northern Central	7,394,293	850,343	251,698	2,260,000	5,578,800	756,641	9,007,905	218.0	—	929,527	340,516	—	—	14	
MASSACHUSETTS.																							
30 Nov. '59	21.2	—	2.0	—	6	4	80	Berkshire	500,500	100,000	—	600,000	—	—	601,360	ope. rat. by Housat.	42,000	7	—	—	—	—	
30 Nov. '59	26.8	1.5	43.6	—	21	26	566	Boston and Lowell	2,245,247	183,345	—	1,830,000	—	6,365	2,671,887	26.8	352,512	531,477	208,798	8	100 1/2		
31 May, '59	74.3	8.8	51.3	—	32	64	606	Boston and Maine	3,846,709	417,233	465,758	4,076,974	—	134,950	4,929,166	118.3	563,484	915,626	450,096	8	110 1/2		
30 Nov. '59	47.0	7.0	23.3	—	22	27	210	Boston and Providence	2,952,800	207,400	70,000	3,160,000	174,220	—	3,663,138	64.0	316,522	654,673	337,648	7	106 1/2		
30 Nov. '59	44.6	24.0	59.2	—	30	56	830	Boston and Worcester	4,291,164	437,416	100,000	4,500,000	—	29,595	5,751,512	83.7	611,046	1,087,071	811,525	7	103 1/2		
30 Nov. '59	46.1	1.1	2.7	—	7	10	109	Cape Cod Branch	907,761	123,864	—	681,890	190,000	39,499	1,092,288	47.2	79,456	118,726	49,374	6	124		
30 Nov. '59	50.0	2.4	8.9	—	12	13	331	Connecticut River	1,614,385	187,558	—	1,591,100	252,500	—	1,928,294	75.4	177,164	271,592	138,225	44	70		
31 May, '59	44.1	30.5	24.4	—	56	47	429	Eastern	4,134,737	315,165	296,103	2,853,400	2,030,500	—	5,028,581	120.7	699,152	843,915	343,915	69	101		
30 Nov. '59	19.9	1.3	3.6	—	29	28	656	Essex	742,592	4,416	—	299,107	280,261	197,428	776,796	ope. rat. by Eastern	11,665	—	—	—	—		
30 Nov. '59	60.9	16.8	70.9	—	3	3	37	Fitchburg	3,190,851	250,149	—	3,540,000	100,000	—	3,869,729	67.7	341,803	659,458	297,450	6	10 1/2		
30 Nov. '59	14.0	2.4	—	—	3	3	37	Fitchburg and Worcester	293,658	40,228	—	214,296	62,900	300	333,884	26.4	37,245	48,768	12,795	6	98 1/2		
30 Nov. '59	24.9	—	2.0	—	—	—	—	Hampshire and Hampden	577,582	—	—	298,951	303,014	67,065	653,030	ope. r. by N. H. & N. P.	28,791	—	—	—	—		
30 Nov. '59	12.4	—	2.3	—	2	3	27	Lowell and Lawrence	332,853	30,275	—	200,000	100,000	—	363,158	ope. r. by B. and L. P.	12,550	—	—	—	—		
30 Nov. '59	14.6	—	17.1	—	12	12	824	Nashua and Lowell	553,920	95,683	—	600,000	—	—	698,563	30.0	158,374	229,206	68,510	6	113		
30 Nov. '59	20.2	1.6	1.0	—	7	16	146	New Bedford and Taunton	494,843	62,644	—	600,000	—	19,800	564,707	21.8	55,881	143,261	25,264	6	—		
30 Nov. '59	25.9	—	2.3	—	5	9	44	Newburyport	585,272	63,090	—	220,240	221,600	211,693	653,535	36.0	75,868	141,238	14,987	—	104 1/2		
30 Nov. '59	8.6	—	—	23.4	—	—	—	N. York and Boston Air Line	673,302	—	—	223,176	675,000	2,853	901,029	8.4	20,888	22,531	—	—	—		
30 Nov. '59	79.5	7.8	28.6	—	27	46	858	Old Colony and Fall River	3,025,445	324,503	—	3,015,100	134,500	60,900	3,390,269	87.3	410,581	646,755	306,413	6	104 1/2		
30 Nov. '59	13.6	—	0.7	—	1	2	1	Pittsfield and North Adams	432,430	11,247	—	450,000	—	—	450,000	13.6	32,480	48,355	27,000	6	—		
30 Nov. '59	43.4	1.0	14.9	—	12	14	384	Providence and Worcester	1,506,977	254,566	—	1,510,200	300,000	—	1,810,200	44.4	216,327	341,336	136,386	6	104		
30 Nov. '59	16.9	—	1.7	—	3	3	1	Salem and Lowell	366,987	82,543	—	243,305	226,900	316	470,521	ope. r. by B. and L. P.	17,500	—	—	—	—		
30 Nov. '59	11.5	—	0.4	—	2	7	17	South Shore	462,167	39,426	—	259,658	163,230	2,821	513,112	11.5	28,028	58,784	15,460	—	97		
30 Nov. '59	21.9	—	—	—	—	—	—	Stockbridge and Pittsfield	448,700	—	—	448,700	—	—	448,700	ope. r. by Housat.	31,490	—	—	—	—		
30 Nov. '59	11.1	0.6	1.3	—	7	18	144	Taunton Branch	—	—	—	—	—	—	—	—	—	—	—	—	—		
30 Nov. '59	6.1	—	—	36.5	—	—	—	Troy and Greenfield	478,048	—	—	385,200	219,000	9,854	614,000	ope. r. by T. & B.	5,333	—	—	—	—		
30 Nov. '59	69.0	8.0	6.6	—	11	8	192	Vermont and Massachusetts	3,509,622	207,343	—	2,914,225	1,003,880	—	3,516,865	71.0	107,475	246,798	106,817	8	16		
30 Nov. '59	156.1	17.3	106.8	—	72	47	1,149	Western (incl. Alb. & W. S. etc.)	9,934,568	1,095,713	—	5,150,000	6,125,520	208,726	13,457,921	192.0	1,020,054	1,767,068	830,148	8	113		
30 Nov. '59	45.7	—	9.3	—	10	8	149	Worcester and Nashua	1,187,935	140,932	—	1,141,000	194,500	862	1,403,409	45.7	179,490	216,444	94,244	4	60		
MICHIGAN.																							
1 Jun. '59	17.3	—	—	—	2.7	2	1	100	Bay de Noquet and Marquette	—	—	—	—	—	—	—	—	—	—	—	—	—	
30 Sep. '59	57.0	—	—	—	—	—	—	Chic. Detroit & Can. G. T. Junc.	8,270,623	—	—	2,950,000	4,250,000	—	9,008,369	138.0	—	365,036	144,270	—	—	—	
30 Sep. '59	183.0	—	—	—	—	—	—	Detroit and Milwaukee	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Flint and Pere Marquette	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Grand Rapids and Indiana	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
31 May, '59	284.0	—	—	183.0	98	123	1,528	Michigan Central	12,947,238	—	1,149,069	6,057,840	8,284,063	119,089	14,548,411	329.0	—	2,417,915	836,697	—	—	63 1/2	
1 Mar. '59	246.0	293.0	—	—	91	135	976	Mich. S. Th'n & N. Th'n Indiana	14,517,592	1,607,906	1,312,534	8,975,400	9,343,000	816,460	19,595,407	539.0	—	2,019,425	777,273	—	—	14 1/2	
—	—	—	—	—	—	—	—	Pori Huron and Milwaukee	—														

## RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (\*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.	Net.	Dividends.		
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonds and Mortgage Debt.	Floating Debt.									
M.	M.	M.	M.	No.	No.	No.																	
NEW YORK.																							
30 Sep. '69				140.0				Albany and Susquehanna	400,962			404,950			31,135	436,085							
30 Sep. '68	32.9		3.3		5	12	53	Albany and Vermont	1,567,502	136,038		439,005	1,575,099	50,000		32.9	93,894	84,119	11,216				
30 Sep. '67	38.3		34.0					Albany and West Stockbridge	2,392,984			1,000,000	1,932,934			2,892,984	ope. r. by W. estern.						
30 Sep. '66	34.9	2.6		73.6	4	6	39	Black River and Utica	1,156,148	81,405		804,648	700,000	8,158		37.5	38,538	62,941	82,962		100		
30 Sep. '65	14.8		1.6					Blossburg and Corning	496,661			250,000	220,000			14.8	20,647	26,858	13,429				
30 Sep. '64	142.0		13.6		28	32	886	Buffalo, New York and Erie	3,150,762		164,200	680,000	2,592,221	252,142		4,206,709	487,589	641,249	172,321				
30 Sep. '63	63.3		18.0		28	34	312	Buffalo and State Line	2,467,258	312,738	449,000	1,984,850	1,049,000	161,263		3,145,213	87.8	370,488	848,327	419,378	10	120	
30 Sep. '62	24.6		38.1					Cayuga and Susquehanna	1,057,629	37,971		687,000	411,000		1,098,000	34.6	61,435	69,265	10,398				
30 Sep. '61	17.4		2.1					Chemung	400,000			380,000	70,000		450,000	ope. r. by N. Y. & E.		24,000					
30 Sep. '60	46.8		2.9		10	6	83	Elmira, Jefferson & Canand.	600,000			500,000			500,000	ope. r. by Re. ceivers.		80,000					
30 Sep. '59				63.2				Erie and New York City	287,357			352,741	14,000		28,716	395,457							
30 Sep. '58				16.0				Genesee Valley	329,225			75,689			62,500	329,225	ope. r. b. N. Y. & E.		11,999				
30 Sep. '57	17.3		0.5		4	3	50	Hudson and Boston (West'n)	148,000	27,000		175,000				17.3	57,065	63,803	11,999				
30 Sep. '56	144.0		106.5		52	107	542	Hudson River	10,205,906	1,182,372		3,758,466	8,842,000	414,644		150.0	700,224	1,842,636	770,096		45		
30 Sep. '55				73.8				L. Ontario, Auburn & N. York	74,203			75,771											
30 Sep. '54								L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000		115,856								
30 Sep. '53	84.0	2.5	10.1		18	37	129	Long Island	2,211,659	554,611	1,000	1,852,718	636,997		17,539								
30 Sep. '52	297.8	258.1	313.8		211	237	3,171	New York Central	25,104,200	5,257,077	588,980	24,000,000	14,333,771		40,386,005	655.9	3,945,128	6,200,848	2,791,419		7	77	
30 Sep. '51	448.0	19.0	282.5		219	194	2,763	New York and Erie	31,148,015	4,172,192	1,311,886	11,000,000	25,325,505	2,074,795		38,401,300	495.0	3,019,000	4,282,149	1,404,837		35	
30 Sep. '50	130.8	2.1	30.9		33	93	57	New York and Harlem	7,303,339	634,777		5,171,100	5,151,287		147,940								
30 Sep. '49	118.0	8.8	17.7		28	8	417	Northern (Ogdensburg)	4,097,209	702,079		3,077,900	1,500,000		4,799,237	12.8	847,500	382,932	120,850				
30 Sep. '48	55.9		2.2		7	6	4	Oswego and Syracuse	675,215	100,462		393,340	215,500		10,875								
30 Sep. '47	75.4		2.0		6	4	33	Pottsdam and Watertown	1,527,072	67,884		665,419	911,000		192,748								
30 Sep. '46	23.2		2.1		6	13	70	Rensselaer and Saratoga	743,958	157,057		610,000	140,000		1,709,167	75.4	107,045	100,047	47,571				
30 Sep. '45	18.4		1.3	32.6				Rochester and Genesee Valley	652,151	1,776		657,500	150,000		23,490								
30 Sep. '44	18.0		1.0		2		32	Sackett Harbor and Ellensburg	871,556	17,714		167,485	278,400		56,810								
30 Sep. '43	21.0		1.6		2		84	Saratoga and Schenectady	480,684			300,000	85,000										
30 Sep. '42	40.9	6.6	8.9		9	12	84	Saratoga and Whitehall	820,518	74,904		600,000	395,000		385,000								
30 Sep. '41				13.2				State Island	114,015			50,603	41,200		22,686								
30 Sep. '40	11.0							Brooklyn and Jamaica	369,856			284,850	85,000		114,489								
30 Sep. '39	81.3		7.1		13	12	117	Syracuse and Binghamton	2,851,292			1,200,130	1,643,126		148,079								
30 Sep. '38	27.2		3.2		7.7	10	6	Troy and Boston	1,366,526	143,687		604,911	806,500		247,676								
30 Sep. '37	6.0		0.1					Troy and Greenbush	294,731			275,000											
30 Sep. '36	2.1		2.1					Troy Union	732,114			30,000	680,000		732,114								
30 Sep. '35	96.8		11.0		7	11	238	Watertown and Rome	1,839,787	319,715		1,498,500	685,000		65,683								
NORTH CAROLINA.																							
31 May '60	94.9		6.4					Atlantic and North Carolina	2,157,503			1,545,225	400,000		276,872	2,419,401	94.9		103,953	35,572			
31 May '59	223.0							North Carolina	4,235,000			4,000,000											
31 May '58	97.0							Raleigh and Gaston	1,240,241			973,300	128,200										
30 Sep. '57	161.0		17.1		22	20	144	Wilmington and Manchester	2,586,238		201,500	1,127,511	1,060,000		111,886								
30 Sep. '56	161.9				24	32	144	Wilmington and Weldon	2,869,223		107,000	1,340,213	791,055		102,391								
16 Mar. '55				43.0				Western North Carolina	190,793		4,700	290,212			70,860								
OHIO.																							
31 Dec. '58	118.2				17	12	208	Atlantic and Great Western	613,231			866,939			77,294								
1 Aug. '57	137.0				41	29	508	Bellefontaine and Indiana	3,083,218		10,000	1,859,313	1,267,078		64,251								
1 Aug. '56	60.3				42	38	458	Central Ohio	5,679,508	922,670	106,133	1,828,356	8,733,000	1,126,458		6,810,432	141.0						
1 May '55	37.0				62.1			Cinc., Hamilton and Dayton	2,643,266	504,892	23,500	2,155,800	1,411,000		82,618								
1 May '54	131.8				81.0	16	10	Cinc. and Indianapolis Juno.	6,250,841			2,441,176	3,032,000		228,973								
31 Dec. '53	135.4	8.8			42	31	439	Cinc., Wilmington and Zanesv.	4,087,571	684,955	67,422	4,748,100	38,000		8,242								
31 Dec. '52	67.0				18.0	10	6	Cleveland and Columbus and Cinc.	1,920,933			680,000	1,202,300		161,200								
31 Dec. '51	95.4	1.2	87.9		31	39	453	Cleveland and Mahoning	3,431,732	555,343	541,503	3,000,000	1,667,000		35,500								
30 Nov. '50	101.0				42			Cleveland and Ashabula	9,320,288			3,942,368	4,918,325		658,821								
30 Apr. '49	109.2	79.4			32	62	430	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720		358,605								
31 Dec. '48	61.4				53.0	5	99	Clev., Zanesville and Cincin.	1,714,693			369,673	575,250		632,486								
31 Dec. '47	72.0				31.0	6	103	Columbus and Indianapolis	2,555,000			750,000	1,600,000		205,000								
30 Nov. '46	54.5		10.4					Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700		50,500								
31 Mar. '45	144.0							Dayton and Michigan	5,241,748	65,147	4,890	2,108,380	2,513,400		394,687								
31 Aug. '44	36.6				5	3	87	Dayton and Western	980,262	104,912		289,692	700,000		90,482								
31 Aug. '43	16.0				47.0	3	2	Dayton, Xenia and Belpre	860,496			437,538	422,658										
31 Dec. '42	45.0				6	6	72	Eaton and Hamilton	1,101,744	79,022	62,630	469,762	728,853		152,694								
30 Sep. '41	38.0				84.0			Fremont and Indiana															
31 Aug. '40	32.0				6	6	68	Greenville and Miami	888,000			300,000	473,000		75,000								
30 Nov. '39	13.0				34.0	1	2	Iron	172,830														
30 Nov. '38	83.5				39	32	602	Little Miami	3,451,179	785,817	438,857	2,981,293	1,399,000										



## RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (\*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Engines.	Cars			Property and Assets.					Liabilities.					Gross.	Net.	Dividends.		
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.						
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P. C.	P. C.		
PENNSYLVANIA, (Continued.)																							
30 Nov. '59	487.5		3.1	99.5	4	4	43	Pittsburg and Connellsville	1,501,414	70,396		1,753,864	1,500,000	177,920	3,444,154	60.0		60,438					
30 Nov. '59	467.5		56.8		96	80	1,059	Pittsb'g, Ft. Wayne & Chicago	15,557,779	1,785,182	91,100	6,266,278	8,896,457	1,883,847	17,269,419	467.5	1,850,031	1,966,988	674,655		4		
30 Sep. '59	31.0			11.0				Pittsburg and Steubenville	1,947,462			1,221,277	280,000										
30 Sep. '59	54.0		8.0		7	7	26	Schuylkill and Susquehanna	1,258,700	*		1,258,700	97,000		1,355,700	54.0							
30 Sep. '59	9.2	15.8	14.9					Schuylkill Valley	573,616			568,150			573,616	24.5		34,501	29,604	34			
30 Nov. '59	28.0		3.3		4	1	445	Shamokin Valley & Pottsville	1,321,847			500,000	821,447		1,321,847	33.0		96,227	54,582				
31 Dec. '59	148.0		20.0	140.0				Sunbury and Erie	6,393,712	107,252		4,506,920	4,369,070	861,271	10,169,869	148.0							
30 Nov. '59	29.6		6.5	31.9				Tioga	703,349	85,932		97,550	396,000			29.6		83,072	47,007	0			
30 Sep. '59	26.4		2.1		4	11	9	Westchester and Philadelphia	1,410,638	74,677		682,170	944,169	52,434	1,679,301	26.4		125,597	4,502				
31 Mar. '59	78.0							Williamsport and Elmira	3,650,682	880,847		1,500,000	2,361,973	161,272	4,148,920			191,970	96,308	1			
RHODE ISLAND.																							
31 Aug. '58	60.0		2.0		9	13	84	N. Y., Providence and Boston	2,158,000	*		1,508,000	806,500		2,158,000	50.0	147,231	208,439	96,571	5			
30 Nov. '58	13.6		0.5				5	Providence, Warren & Bristol	434,698	1,588		287,917	109,937	39,139		13.6	23,514	23,005	1,278				
SOUTH CAROLINA.																							
31 Dec. '58	13.2	1.6		182.4	2		26	Blue Ridge	2,126,839			1,916,815	217,577		2,134,092	13.2							
31 Dec. '58	54.9			47.4	4	8	21	Charlotte and Savannah	801,615	34,372	250,000	706,365	195,266	197,905	1,099,536	51.9							
31 Dec. '58	109.6				13	9	176	Charlotte and South Carolina	1,719,045	*		1,201,000	384,000			109.6		283,263	161,536	6			
31 Dec. '58	40.3							Cheraw and Darlington	600,000			400,000	200,000			40.3							
1 Jan. '59	143.2	21.3						Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	345,546	2,919,554	143.2		341,190	125,371				
31 Aug. '58	22.5							Kings Mountain	196,230	*		200,000			200,000	22.5							
31 July '58	32.0							Laurens	543,403	*		400,000	106,218		575,729	32.0		27,568	8,527				
28 Feb. '59	102.0							North-Eastern	2,011,652			985,743	960,410	108,172	2,057,325	102.0		220,014	96,145				
31 Dec. '58	136.0	106.0			62	59	790	South Carolina	5,517,884	1,103,130	374,060	4,179,475	2,770,463	193,086	7,701,387	242.0		1,501,008	820,511	7			
31 July '58	25.1			41.9				Spartanburg and Union								25.1							
TENNESSEE.																							
1859.....				17.0	2		14	Edgefield and Kentucky	857,947	*		333,204	612,000	60,900		30.0	29,845	9,359	7,486				
1859.....	30.0		1.8		12	10	171	East Tennessee and Georgia	3,637,367			1,259,673	2,020,000	200,000		140.0		318,718	187,466				
1859.....	140.0		8.0		10	10	125	East Tennessee and Virginia	2,310,033	156,264		536,654	1,902,000	390,407		130.3	150,142	297,806	149,167				
1860.....	271.6	19.4	20.0		43	37	667	Memphis and Charleston	5,866,578	878,069	129,364	3,809,949	2,659,000	280,112	7,627,797	291.0		1,635,096	873,597				
1860.....	271.6	16.0	20.0	3.9	9	6	242	Memphis and Ohio	2,259,267	141,144		570,000	1,361,000	145,000									
1859.....	100.0		30.6	55.8				Memphis, Clarksv. & Louisv.	2,000,000	100,500		298,721	740,000										
1859.....	59.0		40.1	7			119	Mississippi and Tennessee	1,137,400	*		798,285	554,949	319,513		59.4	69,870	177,256	60,029				
1859.....	47.4		2.3	4	5		46	Mississippi Central and Tenn.	892,710	82,906		317,447	632,500	22,369		47.4	54,175	83,129	44,666				
1859.....	34.2		7.0		12	2	81	McMinnville and Manchester	533,807	56,816		144,894	406,000	6,000		34.2	30,065	23,808	13,892				
1859.....	149.7	44.0	7.9		39	17	319	Nashville and Chattanooga	3,632,882			2,256,479	1,524,000	21,769		159.0	117,595	675,832	310,199	3			
1859.....								Nashville and Northwestern															
1860.....	45.8		4.2	11.7	5	5	32	Tennessee and Alabama	76,016	76,016		595,922	360,000	204,544		45.8	67,950	127,953	87,243				
1859.....	30.0		0.6	8.0				Winchester and Alabama				216,962	413,000	408,477		30.0		1,248					
TEXAS, (all aided by State).																							
1859.....	32.0			158.0				Buffalo Bayou, Braz. & Col'do								32.0							
1859.....	56.0			184.0				Galveston, Houst. & Henderson								56.0							
1860.....	50.0		1.5	75.0	2	1	40	Houston and Brazoria	1,250,000			275,000	240,000	171,560		50.0	31,300	32,670					
1 May '60	70.0		6.0	280.0	7	6	124	Houston and Texas Central	4,232,345	*		455,000	975,000	369,000		70.0	102,200	282,846	196,568				
1859.....	25.0			110.0				San Antonio & Mexican Gulf								25.0							
1859.....	28.0			766.0				Southern Pacific								28.0							
VERMONT.																							
31 May, '59	90.7		8.6	19.6	7	8	181	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000		90.7	98,866	49,122	82,001					
31 Aug. '59	119.6		13.0		26	18	555	Rutland and Burlington	3,959,708	601,509	92,859	2,233,376	3,145,001	1,013,764	6,392,141	119.6	395,762	354,288	81,561				
31 Aug. '59	62.0		3.4		10	5	201	Rutland and Washington	1,771,883	*		960,000			1,780,688	62.0	175,830	172,826	87,124				
30 Jun. '59	119.0		20.0		42	28	886	Vermont Central	8,402,055			5,000,000	3,853,000	1,423,299	10,276,299	169.0	617,262	702,271	116,678				
30 Jun. '59	47.0		2.8					Vermont and Canada	1,350,695			1,350,000			1,380,695	47.0	op. r. by Vt. Central						
31 Aug. '59	23.7		0.7		4	4	54	Vermont Valley	1,212,274	89,612		516,164	793,200		1,308,864	23.7	op. r. by Vt. Central	43,998	10,498				
31 Aug. '59	54.0	10.6						Western Vermont	1,083,500			332,000	700,000		1,083,500	54.0	op. r. by Troy & Bost.	56,858					
VIRGINIA.																							
31 Aug. '59	41.3			122.1				Alex., Loudoun & Hampshire	1,492,194	42,000		1,403,018	36,188	88,131	1,584,194								
30 Sep. '59	77.8	8.9	3.8	105.6	9	5	221	Manassas Gap	2,962,548	210,680		2,969,861	775,500	118,789		113.7	703,084	136,302	43,062				
30 Sep. '59	79.2		4.8		5	2	76	Norfolk and Petersburg	2,060,373	122,156		1,500,124	590,610	165,161	9 months	79.2	47,702	54,121	16,332				
30 Sep. '59	103.5							Northwestern Virginia	5,322,150	*		468,005	5,719,229		103.5		345,427	248,004	loss				
30 Sep. '59	148.7	9.1	4.5		12	10	101	Orange and Alexandria	6,060,824			1,981,167	2,316,879	255,532	6,225,015	176.6		288,297	167,572				
30 Sep. '59	123.3	10.1			19	13	279	Petersburg and Lynchburg	3,040,686	374,996		1,365,300	1,851,500	292,842	4,745,256	123.3		410,166	201,244				
30 Sep. '59	59.2	21.3			14	17	131	Petersburg and Roanoke	1,223,526			883,200	102,500	6,799	1,486,527	80.5		326,554	213,852	74			
30 Sep. '59	140.5	2.7	12.0		22	20	410	Richmond and Danville	3,211,828														





## AMERICAN RAILROAD BOND LIST.

(\*) signifies that the road is in the hands of receivers. (t) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
<b>La Crosse and Milwaukee:</b>					<b>Montgomery and West Point:</b>					<b>Orange and Alexandria:</b>				
1st Mortgage (Eastern Div.)	\$908,000	†	-----	-----	Alabama State Loan	\$122,622	---	-----	-----	State Loan	\$400,000	---	-----	-----
2d Mortgage (Eastern Div.)	1,000,000	†	-----	-----	Mortgage (due 1880, '63 and '65)	350,000	6	var.	-----	1st Mortgage	1,055,500	6	-----	81
1st Land Grant (Western Div.)	4,000,000	†	-----	15	Mortgage	450,000	8	1866	-----	2d Mortgage	461,378	8	-----	90
2d Land Grant (Western Div.)	358,800	†	-----	15	<b>Muscogee:</b>					<b>Pacific (Mo.):</b>				
3d Mortgage (whole road)	1,700,000	†	-----	-----	1st Mortgage	249,000	7	-----	-----	State (Mo.) Loan	7,000,000	6	-----	-----
Farm Mortgage	1,087,700	†	-----	-----	Nashville and Chattanooga:					State Loan (S. W. Branch)	2,800,000	6	-----	-----
Unsecured Bonds	1,785,000	†	-----	-----	Mortgage (State endorsed)	1,500,000	---	-----	-----	Construction	4,500,000	6	-----	-----
<b>Lexington and Frankfort:</b>					Chat. and Clev. Subsc. (endorsa.)	150,000	---	-----	-----	<b>Panama:</b>				
Mortgage, due 1864, '69 and '74	180,000	6	-----	-----	Not endorsed	24,000	---	-----	-----	1st Mortgage Sterling	1,250,000	7	1865	100
<b>Little Miami:</b>					<b>*New Albany and Salem:</b>					2d Mortgage Sterling	1,150,000	7	1872	-----
Cincinnati Loan	100,000	---	-----	-----	Crawfordsville	175,000	7	-----	-----	Convertible	27,000	7	-----	-----
1st Mortgage	138,000	6	1883	82½	1st Mortgage	500,000	10	-----	-----	<b>Pennsylvania:</b>				
2d Mortgage	7,000	6	-----	-----	1st Mortgage	2,235,000	6	-----	-----	1st Mortgage (convertible)	4,905,000	6	1888	101½
3d Mortgage	981,000	6	-----	-----	<b>New Haven and Hartford:</b>					2d Mortgage	1,923,000	6	1875	85
<b>Long Island:</b>										2d Mortgage Sterling	1,539,340	6	1875	-----
State Loan (S. F.)	100,000	5	1876	-----						State Works Bonds	7,400,000	5	-----	-----
1st Mortgage	500,000	6	1870	80						<b>Pennsylvania Coal Company:</b>				
<b>Louisville and Frankfort:</b>										1st Mortgage	600,000	7	-----	-----
Louisville Loan	174,000	---	-----	-----						<b>Penobscot and Kennebec:</b>				
1st Mortgage	248,000	---	-----	-----						Bangor City 1st Mortg. (Coupon)	800,000	6	1874	-----
<b>Louisville and Nashville:</b>										2d Mortgage (Coupon)	250,200	6	1876	-----
State (Tenn.), 1st Lien	300,000	6	-----	-----						3d Mortgage (Coupon)	156,600	6	1871	-----
1st Mortgage	2,000,000	---	-----	-----						<b>Pensacola and Georgia:</b>				
<b>McMinnville and Manchester:</b>										State Internal Improvement	---	7	35 y's	-----
State (Tenn.)	372,000	6	-----	-----						Free Land	---	---	---	-----
Mortgage	24,000	7	-----	-----						<b>Peoria and Oquawka:</b>				
Mortgage	10,000	6	-----	-----										
<b>Madison and Indianapolis:</b>										<b>Peru and Indianapolis:</b>				
State (Ind.) Loan	---	---	-----	-----										
Mortgage	---	---	-----	-----						<b>Petersburg:</b>				
<b>*Marietta and Cincinnati:</b>										Mortgage (due 1863 to 1872)	103,000	7	var.	-----
1st Mortgage [convertible]	2,500,000	7½	1888	-----						<b>Petersburg and Lynchburg (S. Side):</b>				
2d Mortgage	2,000,000	7½	-----	-----						State (Va.) Loan (S. F.)	800,000	7	-----	-----
3d Mortgage	1,500,000	7½	-----	-----						1st Mortgage (1859-'70-'75)	365,000	6	var.	-----
Sterling Income	333,400	4	-----	-----						3d Mortgage (1862-'70-'72)	378,000	6	var.	-----
Domestic	928,617	---	59-'62	-----						Special Mortgage (1865-'68)	175,000	6	var.	-----
<b>Memphis and Charleston:</b>										Last Mortgage (1861 to 1869)	133,500	8	var.	-----
State (Tenn.) Loan	1,100,000	6	-----	-----						<b>Phila., Germantown and Norristown:</b>				
1st Mortgage	1,600,000	7	1880	-----						Consolidated Loan	274,800	---	-----	-----
<b>Memphis, Clarksville and Louisville:</b>										Loan of 1842	100,000	---	-----	-----
State (Tenn.) Loan	910,000	6	-----	-----						<b>Philadelphia and Reading:</b>				
<b>Memphis and Ohio:</b>										Mortgage	705,000	5	1860	91½
State (Tenn.) Loan	1,340,000	6	-----	-----						Mortgage	1,572,800	6	1860	91½
<b>Michigan Central:</b>										Mortgage (convertible)	886,000	6	1860	91½
1st Mortgage Sterling	467,489	6	-----	90						Mortgage (convertible)	134,000	6	1860	91½
1st Mortgage (convertible)	500,000	8	-----	92						Mortgage	3,209,600	6	1870	79½
Unconvertible	258,000	8	-----	-----						Mortgage (convertible)	3,586,500	6	1886	66½
1st Mortgage (convert.) Dollar	3,831,000	8	-----	-----						Lebanon Valley R. R. (convert.)	1,500,000	7	1886	71
1st Mortgage (S. F.), convertible	3,087,000	8	-----	95						Real Estate Mortgage	616,450	---	var.	-----
<b>Mich. Southern and N'n Indiana:</b>										<b>Phila., Wilmington and Baltimore:</b>				
Michigan Southern	993,000	7½	1857	-----						Mortgage Loan	688,929	6	1860	-----
Northern Indiana	985,000	7½	1861	70						Mortgage Loan	1,696,500	6	1864	-----
Erle and Kalamazoo	300,000	†	1862	-----						Improvement	119,000	6	1863	-----
Michigan Southern	259,000	†	1863	-----						<b>Pittsburg and Connelleville:</b>				
Northern Indiana	299,000	†	1863	-----						Pittsburg Loan	500,000	---	-----	-----
Jackson Branch	203,000	†	1865	81						Allegheny Co. Loan	750,000	---	-----	-----
Goshen Air Line	1,335,000	†	1868	68						Connellsville Loan	100,000	---	-----	-----
Detroit and Toledo	336,000	†	1876	70½						McKeesport Loan	100,000	---	-----	-----
General Mortgage (S. F.)	2,468,000	†	1885	70½						Baltimore Loan	1,000,000	---	-----	-----
2d Mortgage	2,175,000	†	1877	50						Cumberland Loan	200,000	---	-----	-----
<b>*Milwaukee and Beloit:</b>										<b>*Pittsburg, Ft. Wayne and Chicago:</b>				
1st Mortgage	630,000	8	-----	-----						1st Mortgage (O. and P.)	1,000,000	---	1865	-----
<b>Milwaukee and Chicago:</b>										2d Mortgage (O. and P.)	750,400	---	1866	-----
1st Mortgage	400,000	8	-----	-----						Income (O. and P.)	1,991,000	---	1873	62½
2d Mortgage	200,000	7	-----	-----						Bridge (O. and P.)	199,500	---	-----	-----
<b>*Milwaukee and Horicon:</b>										1st Mortgage (O. and L.)	1,000,000	---	1872	-----
1st Mortgage	420,000	8	-----	-----						2d Mortgage (O. and L.)	380,000	---	1873	-----
2d Mortgage	600,000	8	-----	-----						1st Mortgage (F. W. and Chic.)	1,250,000	---	1873	-----
Farm Mortgage	150,000	10	-----	-----						Real Estate (F. W. and Chic.)	498,000	---	1874	-----
<b>Milwaukee and Mississippi:</b>										Mortgage, Consolidated Comp'y	1,229,000	---	1887	-----
1st Mortgage (convertible)	74,000	10½	1861	65						<b>Pittsburg and Steubenville:</b>				
1st Mortgage (convertible)	526,000	8½	1862	64						Mortgage	500,000	†	1865	-----
1st Mortgage (convertible)	650,000	8½	1863	67						<b>Platte County:</b>				
1st Mortgage (convertible)	1,250,000	8½	1877	67						State (Mo.) Loan	300,000	6	1879	-----
South-West Branch	350,000	8½	1866	60						<b>Potomac and Watertown:</b>				
2d Mortgage	600,000	10½	1862	48						1st Mortgage	500,000	7½	64-'74	-----
Construction	500,000	7½	1859	55						<b>Quincy and Chicago:</b>				
3d Mortgage	500,000	8½	1862	55						1st Mortgage	1,200,000	---	1873	-----
<b>Mississippi Central:</b>										<b>Racine and Mississippi:</b>				
1st Mortgage	1,007,363	7	-----	-----						1st Mortgage (Eastern Division)	680,000	†	-----	-----
Income	91,200	10	-----	-----						1st Mortgage (Western Division)	757,000	†	-----	-----
Tennessee State	45,000	6	-----	-----						<b>Raleigh and Gaston:</b>				
<b>Mississippi Central and Tenn.:</b>										Coupon	100,000	---	1862	-----
State (Tenn.) Loan	529,000	6	-----	-----						<b>Rensselaer and Saratoga:</b>				
Income	95,500	---	-----	-----						1st Mortgage	---	7	1863	-----
<b>Mississippi and Missouri:</b>										<b>Richmond and Danville:</b>				
1st Mortgage (convertible)	1,000,000	7	-----	-----						State (Va.) Loan	600,000	---	-----	-----
2d Mortgage (S. F.)	400,000	8	-----	-----						Guaranteed by State	200,000	---	1875	91
Oskaloosa Division	1,425,000	7	-----	-----						Mortgage (Coupon)	250,000	---	1869	-----
Land Grant	7,000,000	7	-----	-----						Registered	150,000	---	1860	-----
<b>Mississippi and Tennessee:</b>										<b>Richmond, Fred. and Potomac:</b>				
Tennessee State Loan	98,000	6	1885	-----						Sterling (£87,000)	324,000	---	1860	-----
Mississippi State Loan	202,799	6	-----	-----						Convertible	54,500	---	1875	-----
1st Mortgage	171,000	7	1876	-----						Dividend Certificates	35,800	---	1867	-----
<b>Mobile and Ohio:</b>										Dividend Certificates	265,909	---	1869	-----
City (Mobile) Tax Loan	400,000	6	-----	-----						<b>Richmond and Petersburg:</b>				
Tennessee State Loan	674,860	6	-----	-----						Coupon	159,000	---	1875	-----
Alabama State Loan	359,410	6	-----	-----						<b>*Rutland and Burlington:</b>				
Income	759,418	8	1861	-----						1st Mortgage	1,800,000	---	-----	-----
Income	354,723	8	1862	-----						2d Mortgage	913,500	---	-----	-----
Income	375,132	8	1865	-----						3d Mortgage	429,400	---	-----	-----
Income	18,700	8	1867	-----						<b>Sacramento Valley:</b>				
Sterling	878,035	6	1883	-----						1st Mortgage	400,000	---	-----	-----
Mississippi State Loan	200,970	6	-----	-----						2d Mortgage	354,000	---	-----	-----

## AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
<b>Sandusky, Dayton and Cincinnati:</b>				
Mortgage	182,000	10	1866	---
Mortgage	997,000	7	1866	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	'60-'62	---
<b>Sandusky, Mansfield and Newark:</b>				
1st Mortgage	1,200,000	7	1866	---
<b>Saratoga and Whitehall:</b>				
1st Mortgage	250,000	7	1868	---
1st Mortgage (R. and W. Br.)	100,000	7	1866	---
Unsecured	45,000	7	1868	---
<b>Seaboard and Roanoke:</b>				
1st Mortgage	300,000	7	1860	---
2d Mortgage	75,000	7	1870	---
4th Mortgage	60,000	7	1860	---
<b>South Carolina:</b>				
State Loan	200,000	5	1868	---
Sterling	183,333	6	1863	---
Sterling	2,000,000	5	1866	---
Auditors	246,500	7	1866	---
<b>Southern Mississippi:</b>				
1st Mortgage	500,000	7	1866	---
<b>South-Western (Ga.):</b>				
1st Mortgage	631,000	7	1875	---
<b>*Springfield, Mt. Vern. and Pittab.</b>				
1st Mortgage	500,000	7	1866	---
2d Mortgage	450,000	7	1866	---
<b>*Steubenville and Ind. (P. C. and C.):</b>				
1st Mortgage	1,500,000	7	1866	---
2d Mortgage	900,000	7	1866	---
<b>*St. Louis, Alton and Chicago:</b>				
1st Mortgage	2,000,000	7	1866	---
2d Mortgage	1,535,000	7	1866	---
3d Mortgage (Income)	1,000,000	10	1874	---
<b>St. Louis and Iron Mountain:</b>				
State (Mo.) Aid	2,501,000	7	1866	---
St. Louis City Subscription	500,000	7	1866	---
St. Louis County Subscription	1,000,000	7	1866	---
Carondelet Subscription	50,000	7	1866	---
<b>Sunbury and Erie</b>				
Mortgage	1,000,000	7	1866	---
Mortgage	7,000,000	5	1866	---
<b>Syracuse, Binghamton and N. Y.:</b>				
<b>Terre Haute, Alton and St. Louis:</b>				
1st Mortgage (convertible)	1,000,000	7	'62-'72	70
2d Mortgage (convertible)	2,000,000	7	'68-'70	40
1st Mortgage (Bel. and Ill.)	517,000	7	1873	---
2d Mortgage (Bel. and Ill.)	494,000	7	1869	---
3d Mortgage (Bel. and Ill.)	508,000	10	1874	---
<b>Tennessee and Alabama:</b>				
State (Tenn.) Loan	814,000	7	1866	---
Mortgage	46,000	7	1866	---
<b>Terre Haute and Richmond:</b>				
1st Mortgage (convertible)	230,000	7	1866	---
<b>Toledo, Wabash and Western:</b>				
1st M. (L. Er. Wab. and St. Louis)	2,500,000	7	1866	59
2d M. (L. Er. Wab. and St. Louis)	1,000,000	7	1869	---
3d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1861	---
Real Estate (L. Er. W. and St. L.)	300,000	7	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7	1866	65
2d Mortgage (Toledo and Ill.)	800,000	7	1866	65
3d Mortgage (Toledo and Ill.)	600,000	7	1866	65
<b>*Vermont Central:</b>				
1st Mortgage	---	---	---	16
2d Mortgage	---	---	---	1
<b>Virginia Central:</b>				
Mort. guaranteed by State of Va.	100,000	6	1860	84
Mortgage	206,000	6	1872	82
Mortgage (coupons)	941,000	6	1864	---
Dividend, due 1865, '66 and '75	238,346	6	var.	---
Income (1859 to 1863)	168,882	7	var.	---
<b>Virginia and Tennessee:</b>				
State (Va.) Loan	1,000,000	6	1867	---
1st Mortgage	500,000	6	1872	85
Fractional Mortgage	23,500	6	1868	82
2d or Enlarged	1,000,000	6	1864	81
Balt Works Br. Mort. due '68-'61	203,000	6	var.	---
3d Mortgage (Income)	431,000	6	1866	88
<b>Warren (N. J.):</b>				
1st Mortgage	568,500	7	1875	---
<b>Watertown and Rome:</b>				
Mortgage (new bonds)	800,000	7	1860	---
<b>Western (Mass.):</b>				
Sterling (£299,900)	4,319,520	5	'68-'71	---
Albany City (Alb. and W. S.)	1,000,000	6	'66-'76	---
<b>*Western Vermont:</b>				
1st Mortgage	700,000	7	1861	---
<b>Williamsport and Elmira</b>				
1st Mortgage	1,000,000	7	1860	68
<b>Wilmington and Manchester:</b>				
1st Mortgage	596,000	7	1866	74
2d Mortgage	1,000,000	7	1866	---
Income	177,000	7	1866	---
<b>Wilmington and Weldon:</b>				
Mortgage, payable in England	443,555	7	1866	---
Sterling, issued in 1858	144,500	7	1866	---
Company's, endorsed by State	208,500	7	1866	---
<b>Winchester and Potomac:</b>				
Mortgage	120,000	6	1867	---
<b>York and Cumberland:</b>				
1st Mortgage	308,000	7	1866	---

New York Stock Exchange.  
Sale Prices for the week ending Jan. 9, 1860.

	Th. 3.	F. 4.	Sat. 5.	M. 7.	Tu. 8.	W. 9.
<b>FEDERAL STOCKS:</b>						
U. S. 5s, 1874	---	---	92	---	---	---
U. S. 5s, 1865	---	---	---	---	---	---
<b>STATE STOCKS:</b>						
California 7s	37	---	88	---	88	---
Georgia 6s	---	---	---	---	94	---
Illinois 5s	---	---	---	---	---	---
Indiana 5s	---	---	---	---	---	---
2s	---	---	---	---	---	---
Kentucky 6s	---	---	90	97	---	---
Louisiana 6s	---	---	---	---	---	---
Maryland 6s	---	---	---	---	---	---
Michigan 6s	---	---	---	---	---	---
Minnesota 6s	---	---	---	---	---	---
Missouri 6s	72	---	70	70	69	67
New York 5s, 1874	---	---	---	---	---	---
6s, 1865	---	---	---	---	---	---
North Carolina 6s	---	---	---	---	---	---
Ohio 6s, 1860	---	---	---	---	---	---
Tennessee 6s, 1860	76	76	75	75	75	75
Virginia 6s	77	76	75	75	75	76
<b>RAILROAD STOCKS:</b>						
Chicago, Burl. and Q. 67	---	87	67	68	67	---
Chicago and Rock Isl. 57	---	56	55	54	53	---
Chicago and N. West.	---	---	---	---	---	---
Clev., Painesv. & Asht.	---	---	---	---	---	---
Clev. and Pittsburg	---	---	9	---	9	---
Clev. and Toledo	35	34	33	33	32	---
Del., Lack. and West.	---	---	82	---	---	---
Galena and Chicago	66	66	65	63	63	---
Hudson River	49	48	48	46	45	---
Illinois Central (scrip)	80	79	78	76	75	---
Indianapolis and Cinc.	---	---	---	---	---	---
Michigan Central	57	57	56	54	53	---
M. S. and N. I. guard, 37	---	35	35	34	33	---
M. S. and N. I.	16	14	14	14	14	---
Milwaukee and Miss.	10	---	---	---	---	---
New Jersey Central	---	110	---	---	110	---
New York Central	79	78	78	77	77	---
New York and Erie	39	38	36	36	35	---
N. York and Harlem	15	15	15	16	15	---
N. Y. and H. "pref."	38	38	39	38	37	---
Panama	114	116	116	114	114	---
Phila. and Reading	39	39	40	40	39	---
<b>RAILROAD BONDS:</b>						
Burl. N. Y. & Erie 1 M.	---	42	41	---	---	---
Chic. and N. W. 1st M.	---	---	17	18	---	---
" " 2d M.	---	---	---	---	---	---
" " S. F.	---	---	---	---	---	---
Ch. & Tol. S. F. 7 p.c. '85	---	---	71	---	---	---
D. L. & W. 1 M. 8 p.c. '71-5	---	---	---	---	---	---
2 M. 8 p.c. '81	---	---	91	---	---	---
Gal. and Ch. 1 M. 8 p.c. '63	---	---	---	---	---	---
2 M. 8 p.c. '75	---	---	---	---	93	---
Hann. & St. J. 1 M. 8s	55	55	55	55	55	---
Hudson R. 1 M. 7 p.c. '69 105	---	105	105	---	---	---
2 M. 7 p.c. '80	---	---	---	---	---	---
3 M. 7 p.c. '75	---	85	---	---	86	---
Illinois Centr. 7 p.c. '75	---	95	94	94	94	---
" 6 p.c. '75	---	95	---	---	---	---
L. Erie & Wab. 1 M.	---	---	62	62	---	---
" 2 M.	---	---	---	---	---	---
Mich. Cen. S. F. 8 p.c. '82 94	---	95	95	95	95	---
" conv. 8 p.c. '69	---	---	---	---	---	---
Mich. Southern 1st M.	---	---	---	---	80	---
" 2d M.	---	---	---	---	51	---
" S. F. 73	---	75	---	---	75	---
M. S. & N. I. 1 M. S. F.	---	---	---	---	---	---
2 M. 8 p.c. '77	---	---	---	---	---	---
Northern Ind. 1 M.	---	---	---	---	---	---
" 2 M.	---	---	---	---	---	---
N. Y. Central 1st M.	---	---	---	---	---	---
N. Y. C. 6 p.c. certif. '83	---	---	---	---	91	---
1 M. 7 p.c. '64	---	---	---	---	---	---
N. Y. & E. 1 M. 7 p.c. '67 101	---	---	---	---	---	---
" 2 M. 7 p.c. '69	---	97	97	97	97	---
" 3 M. 7 p.c. '71	---	---	---	---	---	---
" 4 M. 7 p.c. '80	---	---	80	---	---	---
" 5 M. 7 p.c. '83	---	---	---	---	---	---
conv. 7 p.c. '62	---	---	---	---	---	---
" 7 p.c. '71 70	---	---	---	---	---	---
" S. F. '75	---	---	65	---	---	---
N. Y. & H. 1 M. 7 p.c. '73	---	---	96	96	96	---
" 2 M. 7 p.c. '84	---	---	---	---	95	---
" 3 M. 7 p.c. '87	---	---	---	---	---	---
Penn. 1 M. 7 p.c. conv. '88	---	---	---	---	---	---
" 2 M. 6 p.c. st'g '75	---	---	---	---	---	---
Ph. and Read. 6 p.c. '60	---	---	---	---	---	---
" 6 p.c. '70	---	---	---	---	---	---
T. H. and A. 1 M. 8s '72	---	---	---	---	---	---
" 2 M. 8s '70	---	---	---	---	---	---
<b>BANK AND INSURANCE STOCK:</b>						
Am. Exchange Bank. 94	---	95	---	95	---	---
America, Bank of	---	---	---	---	100	---
Commerce, Bank of	---	95	---	94	---	---
Merchants' Exch. Bk.	---	---	---	100	---	---
Mercantile (Mar.) Ins.	---	---	---	---	---	---
Commonwealth Bank	---	---	---	---	---	---
Metropolitan Bank	---	---	---	---	103	---
<b>MIXED STOCK:</b>						
Pittsburg	---	---	---	---	---	---
Rockland	---	---	---	---	---	---
Minnesota	---	---	---	---	---	---
Ile Royale	---	---	---	---	---	---
<b>MISCELLANEOUS:</b>						
Del. and Hud. C. Co. 85	---	85	---	85	85	---
Cumberland Coal Co. 8	---	---	---	---	---	---
Penn'a Coal Co. 77	---	---	---	77	87	---
Pacific Mail B. S. Co. 89	---	89	89	88	85	---
Ontario	15	---	---	15	---	---
Brooklyn Water W's. 100	---	---	100	100	100	---

The following are the closing prices in the London Market on the 22d December:

United States 5 p. c. red. '74	92 1/2 to 93 1/2
Illinois Central 6 p. c. red. 1875	86 to 88
Do. 7 p. c. red. 1875	86 to 88
Do. do. Fr. L'd red. '60. 92 1/2	to 93 1/2
Do. \$100 shares, all p'd. 72	to 74
Mich. Cen. 8 per cent. con. '60	93 to 95
Do. do. 1869	89 to 91
Do. do. 1st mortgage	---
(sinking fund), 1888	86 to 91
Do. \$100 shares	52 to 57
Michigan S. & N. Indiana 7 per ct.	---
(sinking fund) 1885	70 to 72
Do. \$100 shares	15 to 20
New York Central, 6 per cent. (sinking fund) 1883	86 to 88
Do. 7 per cent. 1864	91 to 93
Do. 7 per cent. (sinking f.) 1876. 95	to 97
Do. \$100 shares	77 to 78
New York and Erie 1st mortgage 7 per cent. 1867	91 to 93
Do. 2d mortgage, 1859	89 to 90
Do. 3d do. 1883, assented	80 to 81
Do. Bonds, 1862, '71, '75 do.	63 to 65
Do. Shares, assented	34 to 35
Pennsylvania Central B'ds, 1st mort.	---
conv. 6 per cent.	89 to 91
Do. 2d mort. 6 per cent. sterling	90 to 92
Do. \$50 shares	36 to 38
Phila. and Reading B'ds, 6 p.c., 1860. 75	to 80
Do. 6 per cent. 1870	75 to 80
Do. \$50 shares	22 to 26

## American Railroad Journal.

Saturday, January 13, 1861.

## Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

## Share and Money Market.

The share market, after showing a very considerable recovery, has again fallen off within a few days under the less favorable aspects of the question of secession. No solution of it is apparent to the public mind, and the action of several other States, in imitation of South Carolina, has added to the magnitude of the crisis. The movement now appears to be beyond the control, even of the leading actors in it; and we can hardly expect to see a turn in the tide till the commercial and monetary effect of secession is fully seen.

This, we are confident, will produce a very vigorous reaction, but whether of sufficient force to restore anything like the previous status is altogether problematical.

The effect of secession must, as a matter of course, be an immediate and excessive commercial revulsion and disaster. The injury and loss to the seceding State must be severe and permanent. We do not say that the others will not be equal sufferers, but as they are not the movers, their case does not call for comment. The effect of the first step will be to cut the delinquents off from the use and benefit of the capital of the world, which in times of peace permeates and sustains each member of the great family. Thus far the South has depended upon the North—the North upon the old world. Up to



The seceding States propose to brave such a result, to cut themselves off not only from the North, but from the Old World. Bankruptcy is the alternative. This will be soon experienced. With this experience the South will begin to revise their notions of political economy which have been greatly instrumental in urging them on. A person or community that produces cotton, is no more potential than those who produce food, gold and silver, or manufactures. The cotton States assumed a vantage in their favor which they did not possess. They are just as obliged to sell their products, and more so, than other parties are to purchase it. When this matter is fully understood, very different notions will prevail as to the value and commercial effect of the secession movement.

With regard to all our great staples favorable advices continue to be received from abroad, which will continue to give activity to our internal and export trade, and ensure an easy money market. The balance of trade is more decidedly in our favor than it has ever been. The imports into the City of New York for the year ending Dec. 31st, 1860, was \$237,397,000, against \$245,165,000 in 1859. The exports for 1860, were \$145,682,000, against \$137,695,000 in 1859.

#### Cleveland and Pittsburgh Railroad.

At the annual meeting of this company recently held in Pittsburgh, the following gentlemen were elected directors for the ensuing year:

Jas. Farmer, Jas. F. Clark, H. W. Clark, Cleveland; D. C. List, Wheeling; W. W. Holloway, Bridgeport; J. Pennock, J. H. Shoenberger, B. Preston, Pittsburg; H. C. Kingsley, New Haven; J. N. McCullough, Wellsville; J. Atwater, Jr., Catskill, N. Y.; B. P. Drennen, Steubenville.

From the report of the Directors which was presented we obtain the following statement of the earnings and expenses for 1860.

Receipts for 1860.....	\$1,020,637 82
Operating expenses.....	564,497 14
Net earnings.....	456,140 68

—being 45½ per cent of the gross.

A comparison of the gross earnings during the past three years, shows as follows:

Total receipts for 1858.....	\$772,093 53
" " 1859.....	906,710 03
" " 1860.....	1,020,637 82

The increase of last year's earnings over those of 1859, was about 12½ per cent., and over 1858, 82 per cent.

Steady progress has been made in the work of reducing the indebtedness of the Company as will be seen by the following figures:

Indebtedness reduced in 1858.....	\$165,861 45
" " 1859.....	157,863 33
" " 1860.....	260,700 39

The judicious movements made with regard to the re-construction of the financial affairs of the Company, promise well for the interests of all concerned. The Report says:

The operating expenses were about 55½ per cent. of gross receipts. In looking at this percentage, low as it is, it must be borne in mind that the road has suffered a succession of disastrous casualties during the past year. In the month of April the unparalleled flood undermined and swept away large portions of the river division, causing the stoppage of business for some time. The actual cost for repairing this damage was between thirty and forty thousand dollars. In October, the machine shop at Manchester was

destroyed by an incendiary fire, causing a loss in the buildings and machinery, of about \$15,000—the numerous bridges on the main line have nearly all been replaced by new ones, at a cost of over \$11,000. All these are extraordinary expenses, but are included in the statement of operating expenses for the year.—The track has been extensively repaired, about sixteen miles of new rails having been laid down and new ties placed wherever required. The economical, and at the same time efficient management of the line, reflects great credit on President McCullough and Assistant Superintendent C. E. Gorham.

#### Little Rock Railroad.

This road is going forward very rapidly. Hands are at work on it at every available place, and there seems to be a laudible determination on the part of the officers to put it through. The piers of the bridge are very nearly finished, and they are beginning to put the timbers upon the middle one. It is to be completed, we understand, by the first of February; and, in anticipation of it, the company is preparing to raise the track on the other side of the river to a level with it.—*Madison, Ark., Review.*

#### Texas Railroads.

We learn that the various railroads of this State are progressing with unabated energy. About three hundred hands are steadily employed on that section of the Harrisburg Railroad, between Columbus and La Grange, while it is said that equal or even larger numbers of laborers are engaged on the Houston and New Orleans and the Eastern Texas Railroad, nor can we learn that there has been any interruption in the work on the several other railroads of the State, all of which it is believed, will be able to meet the requirements of their respective charters to entitle them to the lands donated by the State.—*Galveston News.*

#### Baltimore and Ohio Railroad.

The following is a general statement of the liabilities and assets of the Baltimore and Ohio Railroad Company, on the 30th September, 1860.

LIABILITIES.	
Stock held by individuals.....	\$5,427,300 00
Do. the City of Wheeling.....	500,000 00
Do. do. Baltimore.....	3,500,000 00
Do. the State of Maryland.....	685,000 00
	\$10,112,900 00
Stock scrip not funded.....	6,002 00
Preferred stock (State 5 per cent. sterling bonds).....	8,000,000 00
Loan redeemable in 1867, interest payable quarterly.....	1,000,000 00
Mortgage bonds given for iron (this entire amount is held in sinking fund for redemption of mortgage debts).....	453,333 32
Loan redeemable in 1875, with coupons, interest semi-annually, in January and July.....	1,128,500 00
Loan redeemable in 1880, with coupons, interest semi-annually, in January and July.....	700,000 00
Loan redeemable in 1885, with coupons, interest semi-annually, in April and October.....	2,500,000 00
City loan.....	5,000,000 00
Dividend, declared 17th Dec., 1856, of portion of surplus fund, in certificates of indebtedness, to be converted into stock on the 1st of June, 1862.....	3,033,060 00
Interest unpaid on the dividend bonds of 1862.....	312,881 00
Open accounts.....	7,299 24
Unclaimed dues.....	20,258 43
Washington Branch road.....	225,681 44
Profit and loss.....	3,741,146 36
	\$31,241,011 79

#### ASSETS.

Cost of road.....	\$18,511,515 29
Second track.....	1,549,559 68
Rolling power.....	8,604,781 08
Real estate.....	1,252,968 59
Bonds of the Central Ohio R. R. Co.....	400,000 00
Central Ohio Railroad Co.....	41,871 48
Stock of the Pittsburg & Connellsville Railroad Co.....	85,000 00
Northwestern Virginia Railroad Co.....	1,603,703 38
Bills receivable, notes of Northwestern Virginia Railroad Co. for loans, etc.....	476,982 42
Wellersburg & West Newton Plank Road Co.....	6,050 00
Stock of the Washington Branch..	1,016,800 00
Sinking fund—For the redemption of the five million loan.....	712,846 36
Do. for the redemption of mortgage debts.....	568,555 06
Do. for the redemption of ground rents on Camden station.....	74,969 93
Bills receivable.....	80,919 40
P. O. Depart. for mail service to Sept. 30, 1860.....	33,561 08
Cash in the hands of officers for disbursements.....	2,064 75
Outstanding dues.....	96,368 80
Uncollected revenue.....	370,225 62
Materials on hand in machinery department.....	\$119,542 70
Less fund reserved for renewal & improvement of machinery.....	36,522 29
	83,020 41
Road department—materials on hand.....	168,941 44
Treasurer—balance in treasury after payment of \$75,000—interest on City Loan—and of \$90,000, for interest on the mortg. bonds of the company, which matures on the 1st proximo, of which balance \$312,831 is held for the payment of the remainder of interest on the dividend bonds of 1862.....	550,867 12
	\$31,241,011 79

#### The Law of Patents in the British Provinces. By T. D. STETSON.

A single patent may now cover Great Britain and Ireland, but such parchment has no effect whatever in any of the British Colonies. Each of the latter regulates by its own Legislation all the points pertaining to subjects of this character. Victoria (Australia) grants patents of fourteen years duration to either the inventor or any other person who may be the first to introduce or make known the invention there, the fees being heavy and payable as in Great Britain in instalments during nearly the whole lifetime of the patent. The North American Provinces, are from their proximity to us of more interest than any of the eastern colonies. Canada still persists in issuing patents only to her own citizens, and the patentee there must in all cases be the original and first inventor. The only legitimate and proper manner in which an American may secure his invention in the Canadas, involves an imperative necessity for a residence for one year in the province, before making the application for a patent. Whenever the United States shall see fit to repeal its discriminating tariff and allow foreigners to patent at the same rate as citizens, Canada will "reciprocate" by allowing Americans to patent there. A bill making such provisions has been before the Canadian Parliament, and has been printed, and it is generally understood by those best informed, that the action of the Parliament thereon, depends

mainly, if not entirely on the "reciprocal" action in the United States Congress.

New Brunswick and Nova Scotia are more liberal. New Brunswick has elaborate and well devised laws granting patents to her own citizens and to all British subjects, for a period of ten years, at a merely nominal fee compared with the tax in Great Britain, and to foreigners for a like period, or receipt of a double fee, the total Government charge to a Briton being but five pounds, and to a foreigner ten pounds. Any proper invention may be secured in that Province even after it has been known and patented for years elsewhere, provided it has not been introduced or published in the Province. No one can obtain a patent except the original inventor—or rather, as in this country, none other can sustain such if granted. McCullum's Railroad Bridge and several other important inventions originating in the United States, have been patented there with success, but always necessarily in the name of the American Patentee. No such patent endures after the expiration of the United States term.

Nova Scotia has a law apparently less liberal in its provisions, because making no provisions for patents by foreigners, but this is practically overcome in cases of importance by the passage of special acts putting the foreign inventors in those specific cases on a par with the native. The patent endures fourteen years and is subject to a Government tax of but one pound.

#### Finances of Missouri.

The following statement of the finances of this state is furnished by the Auditor of public accounts.

Amount of revenue received in the year ending Sept. 30, 1859.....	\$828,360 11
Add proceeds of 400 revenue bonds sold to pay interest on Railroad bonds.....	382,238 00
Add amount received from General Government on account of Osage war.....	19,227 21
Total first year.....	\$1,229,835 32
Amount of revenue received in the year ending Sept. 30, 1860.....	932,027 38
Total amount of revenue received in two years, ending Sept. 30, 1860	2,161,852 65
Amount of revenue expended in the year ending Sept. 30, 1859.....	\$667,745 46
Amount of revenue expended in the year ending Sept. 30, 1860.....	523,297 18
	\$1,191,042 64
The balance of revenue in the Treasury, Oct. 1st, 1860, is.....	\$620,719 87
This balance, however, is mostly absorbed by the payment of coupons, on bonds issued to the Pacific, North Missouri, St. Louis and Iron Mountain, and Cairo and Fulton Railroad Companies, which coupons are now in possession of the State Treasurer.	
The estimated receipts for revenue purposes in the two years ending Sept. 30, 1862, are.....	\$1,760,000 00
And the ordinary expenditures during the same period.....	700,000 00

Leaving a balance in Treasury,

Oct. 1st, 1862.....\$1,060,000 00  
This balance of \$1,060,000 is subject to a deduction of twenty-five per centum, each year, of the revenue receipts for school purposes, amounting to 440,000; and also to such appropriations as may be made by the General Assembly for extraordinary purposes.

The estimated amount of receipts on account of State interest Fund, for the two years ending Sept. 30, 1860, is \$882,167 56.

These estimates are based upon the present valuation of property, and do not exceed the actual receipts into the Treasury during the last two years, so far as they relate to ordinary revenue purposes. Heretofore it has been found safe to estimate an annual increase of 15 to 20 per cent. The present gloomy aspect of National affairs is the reason why it has not been done in this instance. If the dangers which now threaten us should be averted, and our difficulties soon become amicably and permanently adjusted, restoring quiet to the country, and reinstating the confidence of our commercial relations so indispensable to activity and prosperity in all our industrial pursuits, these estimates will fall considerably short of the revenue we may reasonably anticipate.

#### THREE PER CENT. FUND.

It will be remembered that under a special law of the State, John W. Reid, of Jackson county, was appointed as Commissioner to obtain from the General Government a sum of money due to Missouri on account of the sales of the public lands in the State. The commission was faithfully, ably and successfully executed. The claim has been allowed and adjusted, and the money paid into the State Treasury. It remains for the General Assembly to authorize the just compensation for his services.

#### RAILROADS.

Among our State interests, the largest, financially considered, and therefore most deserving of your early profound and patient consideration, is that our railroads, and the obligations of the State incurred in their behalf. As is known to those who have given the subject any attention, no aid has been granted to our railroad companies within the last two years. The only changes, therefore, that will appear in an exhibit now, compared with that made in the last biennial message, are in the amounts issued and represented as due; a part of the latter, however, being in a condition of forfeiture. The figures are again presented in tabular form, as follows:

Name of Company.	author'd.	Amount.	Amount.	Amount.
		issued.	due.	
Han. and St. Joseph	\$3,000,000	\$3,000,000	.....	
Pacific—Main Line	7,000,000	7,000,000	.....	
Pacific—S. W. Brch	4,500,000	3,900,000	\$600,000	
Cairo and Fulton.	650,000	650,000	.....	
North Missouri...	5,500,000	4,350,000	1,150,000	
St. Louis & Iron M	3,600,000	3,501,000	99,000	
Platte County....	700,000	7,000,000	.....	
		\$24,950,000	23,101,000	1,849,000
Amount of Revenue Bonds issued in 1859				
and due on June 1st, 1861.....				\$400,000

The \$1,150,000 represented as due to the North Missouri Railroad Company, and \$99,000 to the St. Louis and Iron Mountain Company, have been forfeited by the failure of said companies to pay the interest accruing upon bonds already issued to them. They do not, therefore, now constitute in law, and without further legislation are not to be reckoned as any part of the contingent obligation of the State. The only bonds authorized and yet liable to be issued, are the \$600,000 due the South-west Branch of the Pacific Railroad, which, with the whole amount issued, make an aggregate of \$23,701,000, or, adding the four hundred revenue bonds, (due next July,) the proceeds of which were devoted to the payment of interest, the aggregate is \$24,101,000; \$849,000 less than the aggregate amount authorized. The interest due on January 1, 1861, has been met without any increase of the public debt; but this cannot be done next July under the existing laws affecting the public revenue. How the necessary means shall be provided, is a question deserving the special attention of the General Assembly. Unless a general distrust and monetary panic pervades financial circles, by reason of political troubles, I believe there will be no necessity of

devoting to this use any portion of the public revenue now specially devoted to other purposes.

#### Grain Trade of Lake Michigan.

The following table shows the total shipments of flour and grain from Lake Michigan ports during the year 1860:

	Flour, bush.	Wheat, bush.	Corn, bush.	Oats, bush.	Rye, bush.	Barley, bush.	Flour and Grain, Total in bush.
Chicago.....	713,839	12,487,684	13,938,172	1,039,779	129,146	290,211	31,456,697
Milwaukee.....	286,612	8,161,982	114,444	151,965	36,735	108,793	10,000,969
St. Joseph.....	.....	25,000	.....	.....	.....	.....	25,000
Waukegan.....	.....	170,000	.....	26,000	.....	.....	196,000
Kenosha.....	.....	279,208	.....	.....	.....	.....	295,008
Racine.....	.....	10,861	.....	.....	.....	.....	907,256
Port Washington.	.....	852,961	.....	.....	.....	.....	65,236
Sheboygan.....	.....	6,765	.....	.....	.....	.....	214,862
Manitowoc.....	.....	27,222	.....	.....	.....	.....	55,000
Green Bay.....	.....	30,000	.....	.....	.....	.....	290,876
Total.....	1,088,146	22,226,923	14,067,616	1,216,734	164,891	399,004	48,405,898

#### Debt of Boston.

The Mayor of Boston in his annual message thus states the debt of that city on the 1st instant: Whole amount of debt.....\$9,392,799 77 Deduct the net water debt.....6,243,680 00

City debt proper.....\$3,149,199 77 Deduct cash, in sinking fund.....736,623 91

Debt for all city purposes except water.....\$2,412,575 86 Do. in 1851.....1,845,927 84

Actual increase from Jan. 1, 1851, to Jan. 1, 1861.....\$566,648 02

#### A Horse Railway in Persia.

There is some talk, according to the Russian journals, of a horse-traction railway in Persia, from Teheran to Tauris, to facilitate the means of transport for passengers and merchandise toward the Black sea, with extension to Trebizond, or by Elivand Tiflis to Poli.

#### Columbus and Xenia Railroad

At the annual meeting of this road the following gentlemen were re-elected Directors for the ensuing year: Wm. Dennison Jr., Robert Neil, D. W. Deshler, L. Goodale, Wm. B. Hubbard, Joseph R. Swan, Geo. M. Parsons, of Columbus; W. H. Clement, Larz Anderson, Henry Hanna, of Cincinnati; Abraham Hivling, of Xenia, and Simon Gebhart, of Dayton.

At a subsequent meeting of the Board, the following officers were elected: Joseph R. Swan, President; W. H. Clement, Vice-President; E. W.



Woodward, Superintendent; Cyrus Fay, Secretary and Treasurer.

#### Texas and New Orleans Railroad.

We learn from the *Houston Telegraph*, that this road is being pushed rapidly ahead. The bridge across the Trinity at Liberty is nearly completed, and the iron is being laid upon it. The road is all graded between Liberty and Houston, and the iron is to be laid down by the 15th of January. The rails are laid the balance of the distance to the Sabine. The East Texas Railroad, from Sabine Pass, is graded to Beaumont, and the iron is being laid. It is expected that this will be done by the 15th also; so that the promise now is to have communication between New Orleans and Houston shortened by the middle of February, by an average of at least twelve hours.

#### DUBUQUE & SIOUX CITY R. R. CO. ELECTION NOTICE.

THE first election of directors of said company will be held at their office in Dubuque, Iowa, on Monday the 11th of February, 1861. The stock-books will be closed on the evening of 31st of January, until after the election.

412

JAMES M. MCKINLAY, Secretary.

#### LOCOMOTIVES FOR SALE.

THE Boston and Maine Railroad Company have for sale three second hand Locomotives of the following specification and description.

They all have outside cylinders and connections. Cylinders 15x20, four driving wheels, 4 ft. 6 in. diameter, diameter of boiler, 43 in. No. of tubes, 127; length of tubes, 10 ft.; diameter of do., 1 1/2 in.; weight of engines, about 24 tons each; capacity of tank on tender, 1,500 gall.

The above Locomotives are all in good working order, and are offered for sale on account of the Company having purchased several locomotives of greater capacity. Parties in want of a good machine can have now an opportunity to purchase at a reasonable rate. Application may be made at the office in Haymarket Square, Boston.

WILLIAM MERRITT, Sup't.

Boston, Nov. 24, 1860.

#### DON PEDRO II. RAILWAY.

RIO DE JANEIRO, BRAZIL, }  
September 18th, 1860. }

PROPOSALS are invited for the Graduation, Masonry, and other items of Construction of 11 1/2 miles of this work, extending from the western end of the Great Tunnel of the Serra du Mar down the valleys of the Sacra Familia and Pirahy Rivers to the banks of the River Parahyba.

The work is generally heavy, comprising 1,200,000 cubic yards Earth, 250,000 cub. yds. Rock, and 7,500 cub. yds. of Tunnel excavation, 9,000 cub. yds. Bridge, 8,000 cub. yds. Culvert, and 5,000 cub. yds. retaining Wall Masonry, together with iron Bridge Superstructure, permanent way and stations.

At the Company's office in Rio de Janeiro, may be seen plans, profiles and specifications, where sealed proposals for the whole 11 1/2 miles, or any portion thereof not less than 4 miles, will be received until February 28th, 1861, at which time they will be opened and the work awarded.

The Directory determine, that the technical direction of the work shall be exclusively in the hands of their own Engineers, but will entertain proposals either with a scale of prices for the various kinds of work, or for the entire construction at a fixed price. In the latter case, the monthly payments will be regulated by a scale of prices.

All payments will be made monthly in cash, a percentage being retained as security for the faithful fulfillment of the contract. This, however, may be dispensed with, in case a deposit is made in money, stocks or bonds approved of by the Directory; in the latter case, the depositor will be entitled to the accruing interest upon said security.

Parties unknown to the undersigned will be expected to present evidence of their ability from officers of works upon which they have recently been engaged.

This work is in a mountainous and perfectly healthy region, within 7 hours' ride of Rio de Janeiro. About 200 additional miles are located and remain to be placed under contract.

C. B. OTTONI, President.  
ANDREW ELLISON, Jr., Eng'r in Chief.

#### RAILROAD MAP.

A NEW AND COMPLETE  
LITHOGRAPHIC (COUNTY) MAP  
OF ALL THE  
RAILROADS IN THE UNITED STATES  
AND CANADAS,

IN OPERATION, PROGRESS AND PROJECTED,  
Always corrected to latest dates,

IS PUBLISHED AT THE  
AMERICAN RAILROAD JOURNAL OFFICE,  
No. 9 Spruce St., NEW YORK.

Price of Pocket Edition, by mail, pre-paid.....\$1.00  
" Mounted on Rollers.....2.00  
" Colored in Counties.....4.00

#### LYONS' TABLES.

To Civil Engineers and Contractors.

FOR SALE AT THIS OFFICE.—A set of Tables for finding at a glance, the true cubical contents of Excavation and Embankments for all Bases, and for every variety of Ground and Side Slopes.—By M. E. LYONS, C. E.

SHEET No.	SHEET No.
1. General Table for all Bases and all Slopes.	13. for Base 12 ft. Slope.
2. For Side Hill Cuts and Fills.	14. " " "
3. Base 12 ft. Slopes 1 1/2 to 1.	15. " " "
4. " " " 1 1/2 to 1 1/4.	16. " " "
5. " " " 1 1/2 to 1 1/2.	17. " " "
6. " " " 1 1/2 to 1 1/4.	18. " " "
7. " " " 1 1/2 to 1 1/2.	19. " " "
8. " " " 1 1/2 to 1 1/4.	20. " " "
9. " " " 1 1/2 to 1 1/2.	21. " " "
10. " " " 1 1/2 to 1 1/4.	22. " " "
11. " " " 1 1/2 to 1 1/2.	23. " " "
12. " " " 1 1/2 to 1 1/4.	24. " " "

The Tables are printed in clear, bold type on tinted paper; sheets 25x16 inches. They may be used by candle-light without injuring the eye-sight. Each sheet is complete in itself, and embraces all that is wanted in connection with the Base or Slope designated, whether on level or side hill cross section.

Sent, free by mail, in separate sheets, at 25c. each; or the whole, handsomely bound in cloth, in one volume, for \$7.50.

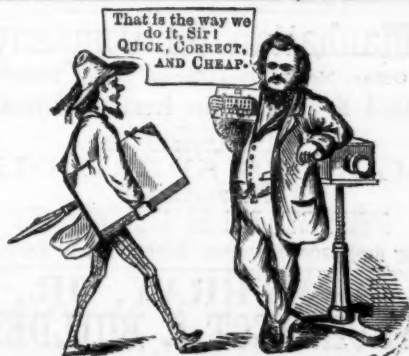
#### ENGINEER'S FIELD BOOK,

By C. S. CROSS, Civil Engineer.

THIS work is designed as a pocket companion, and embraces, in the most compact form, all the necessary tables for prosecuting railroad surveys. It is subdivided as follows:—

- 1st. The method of staking out railroad curves and keeping field notes.
- 2d. Railroad curve tables for expeditiously determining the points at which commences the curving.
- 3d. Application of the Prismoidal formula in determining the quantities of excavation and embankment of canals and railroads from transverse sections.
- 4th. Excavation and embankment tables for expeditiously determining the cubic yards from mean area.

It is a plain, clear and most valuable book for practical Railroad Engineers. Sent, free by mail, upon receipt of the price. For sale at this office. Price \$1.



WATERS & SON,  
(Formerly WATERS & TILTON),

ENGRAVERS, DESIGNERS AND  
Photographers on Wood,

90 Fulton St., New York.

Wood Cuts of all Manufactured Articles, Carriages, Machinery, Book Illustrations, Diagrams, Landscapes, Medical Illustrations, Portraits from Life or other Pictures.  
Tinted Envelopes Designed and Engraved.

LEMUEL W. SERRELL,

SOLICITOR OF

AMERICAN & FOREIGN PATENTS,  
No. 121 NASSAU ST., NEW YORK.

JUST PUBLISHED. Price \$5 per volume.

#### HISTORY OF THE RAILROADS

AND  
CANALS  
OF THE  
UNITED STATES  
OF AMERICA

EXHIBITING THEIR

Progress, Cost, Revenues, Expenditures

AND

PRESENT CONDITION.

By HENRY V. POOR, Esq.,

Editor of the 'AMERICAN RAILROAD JOURNAL'

Illustrated by large and elegant Maps.

THIS work, which is the first of its description ever issued, and which traces the history of AMERICAN RAILROADS AND CANALS through their varying fortunes from the earliest period to the present day, has been written under peculiarly favorable circumstances, whether in relation to editorial experience, or the possession of the material necessary for the proper illustration of the subject, and on these accounts claims a reliability as to facts and deductions which under other auspices could not have been obtained. It is based principally on official reports published from year to year, and which for the past THIRTY YEARS have been accumulating in the office of the AMERICAN RAILROAD JOURNAL. To collate these, and present the essential facts relating to each enterprise, has required patient research and persistent labor. The result has been more successful than could have been anticipated under any circumstances—the general history, the progress of construction, the financial movements and the business operations of every road and canal in the United States being given in detail, the aggregate of all summed up and the averages deduced. The present condition of each work is elaborately set forth in full descriptions of property, share capital, bonds and other evidences of debt, etc., etc.; and the several departments of the subject are so carefully classified and arranged that comparison is rendered easy. The publishers, indeed, have no hesitation in presenting the work to all interested in internal improvements as complete and accurate in every respect—one that in reviewing the past lays the foundation for the future, and which is indispensable alike to the merchant, the banker, the contractor, and indeed to all who invest capital in railroads or canals.

The work will consist of THREE volumes royal 8vo, and be illustrated with a series of large MAPS specially drawn to accompany these volumes.

The first volume, embracing the States of MAINE, NEW HAMPSHIRE, VERMONT, MASSACHUSETTS, RHODE ISLAND, CONNECTICUT, NEW YORK, NEW JERSEY, PENNSYLVANIA, DELAWARE and MARYLAND, is now ready for delivery.

The second and third volumes, the one embracing the WESTERN, and the other the SOUTHERN STATES, are now being prepared and will be issued at an early date.

JOHN H. SCHULTZ & CO.,  
PUBLISHERS,

No. 9 Spruce Street, New York,

## STATIONERY.

**CHARLES W. BLEECKER,**  
No. 16 & 18 William st., cor. of Beaver,  
**NEW YORK,**  
**STATIONER, PRINTER**  
AND  
**BLANK BOOK MANUFACTURER.**

ENGRAVING, and LITHOGRAPHING of every description, executed in the best style; **BLANK BOOKS** for RAILROAD COMPANIES, BANKS and INSURANCE COMPANIES, made to order; **Tracing and Drawing Papers, Tracing Cloth; Note, Letter and Cap Papers; Envelopes;** and a complete assortment of Stationery, all of which is offered on reasonable terms.

## HUFTY'S

**ENGINEERS, ARCHITECTS AND DRAFTSMEN'S**  
**STATIONERY EMPORIUM.**

WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing Paper, Plan and Profile, Protractors, Drawing Pins, Faber's, Jackson's, and other makers' Pencils; Field, Level and Memorandum Books of various patterns; Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles, Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and Sand, Water Colors, Palettes, Patent Binders for letters, Portfolios, etc.,

TOGETHER WITH A GENERAL ASSORTMENT OF  
**Stationery and Blank Books.**

All goods packed with care; and forwarded to any part of the United States.

## HUFTY,

407 Chestnut st., Philadelphia.

## BLANK BOOKS.

**NATHAN LANE & CO.,**

STATIONERS, LITHOGRAPHERS

AND

BLANK BOOK MANUFACTURERS,

No. 69 Wall st. and No. 91 Beaver st.

KEEP on hand a full assortment of articles needed for the COUNTING HOUSE, and for BANKS, INSURANCE, RAILWAY, and other Companies.

Ledgers, Journals, Day-Books, Blotters,  
BLANK BOOKS, CHECKS and CHECK-BOOKS,  
MEMORANDUM AND PASS BOOKS,  
Commercial and Custom-House Blanks, etc.

ORDERS FOR SPECIAL PATTERNS  
EXECUTED WITH NEATNESS AND PROMPTITUDE.

## PAPER,

OF EVERY DESCRIPTION AND STYLE,  
Letter, Post, Note, Fancy, Enamelled, Plain and Colored,  
In whole and half reams, with ENVELOPES to suit.

**GOLD AND STEEL PENS,**  
Of the various approved manufactures, on cards and in boxes.

## INKS,

OF EVERY MAKE ALWAYS ON HAND.

**BLOTTING PAPER,**  
IN SHEETS AND ROLLS.

Copying Presses and Letter Books.

In short, every other article required by the merchant, the banker, the lawyer, the doctor and his patient, at that old-established stand.

## CAR DUCK.

HEAVY 4-PLY FITCHBURG DUCK OF ALL WIDTHS,  
8 to 14 inches, PLUSHES, BURLAPS, CAR HEAD  
LININGS, and all kinds of RAILROAD SUPPLIES.

For sale by

**WILLIAMS & PAGE,**

67 Water st., Boston.

**WASDELL & BROWN,**  
Die Sinkers, Letter Cutters and General Engravers,  
37 BEEKMAN STREET,  
2d FLOOR, NEW YORK.

STEEL Name Punches, Alphabets, Figures, Die Letters, etc.  
BRASS HAND STAMPS for Banks and Offices. HAT-  
TERS' GILDING DIES, PRESSES and EMBOSING DIES.  
Marking Plates, Brands, Pinking Punches, etc., etc.

## OIL! OIL!

## PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR  
RAILROADS, STEAMERS, PROPELLERS,  
AND FOR EVERY CLASS OF  
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists, of  
Thousands of Gallons, PROVE this Oil to be superior for  
Burning, and TWENTY-FIVE per cent. more durable  
than Spum Oil, for Lubricating, and the only Oil that  
is in all cases reliable, that will keep bearings cool, and  
**WILL NOT GUM.**

In no case has it failed to meet the approval of the consumer.  
The SCIENTIFIC AMERICAN and MANUFACTURER'S JOURNAL,  
after testing this Oil, pronounce it superior to any other  
for Lubricating.—For sale ONLY by the Inventor.

**F. S. PEASE, 61 Main st., BUFFALO.**

Reliable orders filled for any part of the United States or Europe.

## OILS! OILS!

**ROOT, RUST & CLARK,**

No. 215 Pearl Street,  
**NEW YORK,**

MANUFACTURERS AND DEALERS IN

SPERM, ELEPHANT & WHALE OIL.

ALSO, IMPORTERS OF

**RAPESEED OIL,**

(Best known substitute for sperm as a lubricator).

HAVING become largely identified with Railroads, Machine  
shops, etc., we are enabled to furnish oils particularly  
adapted to their use, at the very lowest price.

Your orders are solicited.

**Machinists' Lubricating**  
**OIL COMPANY,**

No. 68 Courtlandt and 172 Washington Sts.,  
**NEW YORK,**

**ALEXANDER POPE, Treasurer.**

MANUFACTURERS OF

**WHITE METALLIC OIL,**

AND DEALERS IN

SPERM, LARD, WHALE, AND OTHER OILS.

**Manhattan Oil Company,**

Office, No. 16 Broadway, NEW YORK.

**JAMES M. MOTLEY, Vice Pres't and Treasurer.**

MANUFACTURERS OF

**MASON'S SPERM OIL,**

AND DEALERS IN

SPERM, WHALE, LARD AND OTHER OILS,

For Railroads, Steamers, Machinery and Burning

**J. MURRAY, JR.,**

**ARCHITECT & BUILDER,**

No. 3 CEDAR STREET,

(Near Pearl),

NEW YORK.

STORES AND OFFICES FITTED UP.

**ANALYTICAL AND**  
**Manufacturing Chemistry,**

No. 24 WILLIAM STREET,

Rooms Nos. 28 & 29. NEW YORK.

CAREFUL Analysis made of all Minerals and Commercial  
Articles. Surveys and Reports made upon Mines and Quar-  
ries. Coal Oil Works planned and erected and contracts made.  
The best modes furnished for manufacturing, purifying and  
deodorizing oils from coals, petroleum, and other bituminous  
substances. Coal Oils tested and purified. Superintendents  
and skilled workmen furnished to manage Coal Oil Works and  
Mines. The Kerosene patents from which originated the Coal  
Oil Business of the United States were granted to Dr. GESNER.

**GESNER'S, Chemists & Engineers.**

**STRATTON & CO.,**  
**COMMISSION MERCHANTS,**

No. 1 PINE STREET, N. Y.

AGENTS FOR

**Bauman & Co's Poco Metallic Paint.**

FOR WOOD PAINTING.—It retains a beautiful  
lustre, kills knots and will protect it under any circum-  
stances. It covers 4,000 square feet per hundred pounds,  
and will neither fade, blister, or wash, and a better fire-  
proof than any other Paint, for it will stand a heat that  
will melt lead. It is proof against sea, air and storm.

Refer to **JOHN LEISENRING, Sup't and Eng'r.**  
Lehigh Coal and Navigation Co., Mauch Chunk, Pa.

FOR BRICK AND PLASTER.—It makes all the  
fanciful stone colors, and will cover 4,000 square feet per  
100 pounds. When laid out in blocks, it is truly beautiful.  
Refer to **SEMPLE & BROTHER, Easton, Pa.**

FOR SHIP AND BOAT PAINTING.—It hardens  
under water to the hardness of Iron, preventing the rav-  
ages of the wood-worm effectually. On deck it is imper-  
vious to water, expands and contracts with heat and cold,  
and we warrant it on the forecable six months.

Refer to **CAPTAIN MASON,**  
Schooner "Adolph Ugel," Philadelphia.

FOR RAILROADS.—It preserves Bridges and Ties  
from dry or wet rot and freight cars from burning and  
leaking.

Refer to **R. H. SAYER, Sup't and Eng'r.**  
**WM. KELLOG, Master of Repairs,**  
Lehigh Valley Railroad, Bethlehem, Pa. }  
**A. G. BRODHEAD, Sup't and Eng'r,**  
Beaver Meadows R. R., Mauch Chunk, Pa. }

FOR ROOFING.—It covers 8,000 feet per 100 pounds,  
and may be used in the rain, as it never runs.

Refer to **M. CULLOUGH & CO.**  
**HENRY BUCKWALTER, Philadelphia.**

FOR IRON.—It will stand 200 deg. Fah. and gives  
satisfaction to all the Iron men in Philadelphia, on gas  
holders, steam boilers, Iron fronts and ornamental iron.  
It is equal to Red Lead, for steam and hot water joints.

Refer to **J. W. and J. F. STARR, Camden, N. J.**  
**MORRIS, TASKER & CO.,**  
**MERRICK & SONS, Philadelphia.**

FOR IRON FOUNDERS' PATTERNS.—Five parts  
by weight of it to one of gum shellac dissolved in alcohol,  
will make a covering more impervious to the damp sand  
or loam than shellac alone of equal consistency.

Refer to **THE NOVELTY IRON WORKS, New York.**

FOR STAINING.—Oak, Mahogany, Rosewood and  
Walnut Stains for Furniture, we warrant it equal to Turk-  
ish Umber. Its natural colors are Umber, Brown, Lake,  
Olive and Lead color, which may be combined in endless  
variety. We hope soon to have other colors much lighter

## ANALYSIS.

**DENNIS BAUMAN & CO.,**

Parryville, Carbon County, Pa.

The following are the results of Analysis of your Poco  
Metallic Paint:—Peroxide of Iron 55.84, Red Oxide of  
Manganese, 1.65; Lime, 2.52, Magnesia 1.29; Alumina,  
9.00; Silica, 22.70;—100 parts.

The Analysis proves that this paint is not likely to be  
altered in the slightest degree by ordinary atmospheric  
agents, such as sunlight, rain, cold, or heat. We therefore  
regard your Poco Metallic Paint as of the most durable  
character.

**BOOTH, GARRET & REESE,**  
Practical and Analytical Chemists.

**JACKSON'S**  
**PREMIUM NON-CONDUCTING**  
**FELTING**

For Covering LOCOMOTIVE, STEAMSHIP and STATION-  
ARY ENGINE BOILERS, STEAM and WATER PIPES.

## NATIONAL FERTILIZER.

The attention of Agriculturists is requested to this  
**ECONOMICAL and SUPERIOR FERTILIZER.**  
It possesses all the good qualities of the best known  
manures, without any of the injurious effects produced by  
the over-active Ammonia in Guano and kindred Fertiliz-  
ers, while its price is less than one-half of the  
Peruvian Guano. The various materials composing  
this Fertilizer, are so chemically combined, that they are  
gradually evolved by the heat and moisture of the earth,  
and furnish to the plant all the requirements for a rapid  
and luxuriant vegetation.

[COPY.]

New York, Sept. 8, 1860.

I have used about one ton of the NATIONAL FERTILIZER  
manufactured under Dr. L. Harper's patent, on my sugar plan-  
tation in the Island of Cuba, and although tried upon very  
poor soil, realized a fine crop. I used it in the same way and  
in the SAME QUANTITY as I use Peruvian Guano. I can con-  
fidently recommend it as in every respect equal to Peruvian  
Guano for sugar cane.

**D. DE HEIVERA.**



## IRON BOILER FLUES.

**LAP-WELDED BOILER FLUES,**  
1½ to 8 inches outside diameter, cut to definite length, 2 to 20 feet as required.

**Wrought Iron Welded Tubes,**  
From ½ to 8 inches bore, with Screw and Socket Connections, T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY  
**MORRIS, TASKER & CO.,**  
**PASCAL IRON WORKS.**

Established 1831.

WAREHOUSE—209 SOUTH THIRD STREET,  
PHILADELPHIA.

STEPHEN MORRIS,  
THOS. T. TASKER, JR.

CHAS. WHEELER,  
STEPHEN P. M. TASKER.

## RAILROAD IRON.

THE KENNELAER IRON COMPANY,  
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

### OLD RAILS

received in exchange for new, or for re-manufacturing.  
**JOHN A. GRISWOLD, Agent,**  
TROY, N. Y.

New York Agency:

**BUSSING, CROCKER & DODGE,**  
22 CHURCH ST.

**MORRIS, WHEELER & CO.,**  
SUCCESSORS TO

**MORRIS & JONES & CO.,**  
**IRON MERCHANTS,**  
MARKET AND SIXTEENTH STREETS,  
PHILADELPHIA.

**IRON AND STEEL**  
IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,  
BOILER RIVETS, RAILROAD IRON,  
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.

## RAILROAD IRON.

**WOOD, MORRELL & CO.,**

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA: NORTH PENNA. R. R. BUILDING,  
OFFICE, No. 407 Walnut st.

## RAILROAD IRON.

ENGLISH and AMERICAN Railroad Iron for delivery in New York and other markets in the United States and England. Contracts negotiated by

**E. A. & S. W. HOPKINS,**  
70 Beaver st., New York.

## RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission; delivered at an English port, or at a port in the United States, will be made by the undersigned.

**THEODORE DEHON,**

10 Wall st., near Broadway, N. Y.  
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

## RAILROAD IRON.

THE undersigned is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

**JAMES TINKER,**  
54 Exchange Place,  
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

## RAILROAD IRON.

THE UNDERSIGNED are prepared to contract for the sale of

**RAILROAD IRON**

on advantageous terms, delivered at ports of England, Wales, or the United States.

**MEAD & BELL,**  
13 CHURCH Street, N. Y.

## PROSSER'S PATENT LAP-WELDED IRON BOILER TUBES. TUBULAR BOILER MAKERS

AND

### ENGINEERS' TOOLS.

Tubes for Artesian Wells, conveying Steam or Water, Shafting, etc., screwed or coupled together, in various ways.

### KRUPP'S BEST CAST STEEL.

PARIS'S PATENT GLASS ENAMELLED IRON TUBES,  
FOR WATER, ACIDS, ETC.

### PATENT LAP-WELDED STEEL TUBES.

**THOMAS PROSSER & SON,**  
25 Platt St., New York.

## LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, CAR AXLES, SPIKES, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz. 25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address **J. H. SCRANTON, President,**  
Scranton, Pa.  
or **DAVID S. DODGE, Treasurer,**  
46 Exchange Place,  
NEW YORK.

## RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or on ship at ports in the United States.

**M. K. JESUP & COMPANY,**  
44 Exchange Place.

New York, 1st June, 1870.

## LEWIS E. P. SMITH & CO., Copper and Iron Merchants,

397 and 399 Water st., NEW YORK,  
DEALERS in Heavy Cut Boiler and Bolt Copper, Spelter, Tin, Lead, Composition, Yellow Metal, Antimony Wrought and Cast Scrap Iron.

## RAILROAD IRON.

THE undersigned is prepared to sell AMERICAN and ENGLISH RAILROAD IRON, CHAIRS, SPIKES, CARS and LOCOMOTIVES, at the lowest market price, and securities taken in part payment.

**E. F. FRENCH,**  
Cor. Nassau and Cedar Sts., N. Y.

## RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

**E. & J. MAKIN, 70 Broad st.**

## RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

**C. CONGREVE & SON,**  
6 Pine st., N. Y.

## L. H. MATTISON, MANUFACTURER OF PLATED WARE,

230 PEARL STREET,  
NEW YORK.

## LAND AND SUBMARINE BLASTING.

Also for MILITARY and NAVAL Purposes.  
THE GOMEZ NEW PATENT ELECTRIC SAFETY FUSE TRAIN.

In its use it saves an immense amount of drilling and will accomplish ten times more work than the old fashion Powder Fuse or Galvanic Battery can possibly do.  
For further information apply to the Commissioners of Central Park, New York, where it is extensively used.

**E. GOMEZ,**  
Office 89 Bleecker and 180 Mercer st.,  
New York.

Communicated by Major W. H. BELL, Major of Ordnance, to Colonel H. K. CRAIG, Chief of Ordnance, by order of Hon. JOHN B. FLOYD, Secretary of War.

WASHINGTON ARSENAL, December 19th, 1857.

COLONEL H. K. CRAIG, CHIEF OF ORDNANCE, Washington, D. C.

On the whole, this Train is considered a very great improvement over the old train of powder or match, and is susceptible of ranges of application to military and civil purposes or cases, far wider, more important, more numerous and useful, than the old train now in use could ever be applied to.

I am, sir, most respectfully, your obedient servant,  
W. H. BELL, Major of Ordnance.

## Waterbury Brass Agency,

**ALEX. ANDERSON, Agent,**  
52 BEEKMAN STREET, NEW YORK,  
FOR THE SALE OF

SHEET BRASS,  
COPPER AND BRASS WIRE,  
BRASS AND COPPER TUBING,  
COPPER RIVETS and BURS, ETC.  
Manufactured at WATERBURY, Conn.

### INSTRUMENTS.

**E. BROWN'S SON,**  
MANUFACTURER OF  
TRANSITS, LEVELS,  
RODS, CHAINS, ETC.  
No. 27 FULTON SLIP, N. Y.



No. 22 Pear Street, below Walnut,  
near Third St., PHILADELPHIA.

**J. T. Hobby,** (formerly SAWYER & HOBBY)  
MATHEMATICAL Instrument Maker, at the old stand,  
156 Water st., New York. 1733

**James Prentice,**  
66 NASSAU St., N. Y., Manufacturer of Mathematical Instruments of every description. Orders promptly filled.

**Hugo Harttman,**  
MANUFACTURER of Engineers' and Surveyors' Instruments, 222 S. Third st., PHILADELPHIA.

**W. & L. E. Gurley, Troy, N. Y.,**  
MANUFACTURERS of Engineers' and Surveyors' Instruments. Descriptive and priced catalogue gratis.

**Knox & Shain,**  
MANUFACTURERS of Engineering & Telegraphic Instruments, 46½ Walnut st., Phila. (Two premiums awarded.)

**F. W. & R. King,**  
MANUFACTURERS of Engineers', Surveying and Drawing Instruments, 226 Baltimore st., Baltimore.

**Richard Patten,**  
MANUFACTURER of Mathematical Instruments to the U. S. Government, No. 68 Baltimore st., BALTIMORE, Md.

**James W. Queen & Co., Philad.,**  
MANUFACTURERS of Engineers' Levels, Transits, Chains, Tapes, &c. Priced catalogues by mail gratis.

**Wm. J. Young**  
HAS removed his Engineering and Surveying Instruments Manufactory to No. 43 North Seventh Street, Philadelphia.

**H. SAWYER**  
(of the late firm of SAWYER & HOBBY)  
MANUFACTURER of Transits and Levels, has removed to Union Place, near Washington Av. Yorkers N. Y.

## FINANCIAL.

**DUNCAN, SHERMAN & CO.,**  
BANKERS,  
Corner PINE and NASSAU Sts.,  
**NEW YORK,**

CIRCULAR NOTES AND LETTERS OF CREDIT,  
FOR TRAVELERS,  
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.  
ALSO, MERCANTILE CREDITS,  
For use in EUROPE, CHINA, etc.

**DYETT & HOLMES,**  
STOCK & BOND BROKERS,  
No. 51 EXCHANGE PLACE,  
**NEW YORK.**  
A. H. DYETT, P. W. HOLMES  
Member of Board of Brokers.

**KIRK & CHEEVER,**  
STOCK AND NOTE BROKERS,  
No. 57 WEST THIRD ST.,  
CINCINNATI, OHIO.

SIMEON DRAPER, Auctioneer.

By **SIMEON DRAPER,**  
Office, No. 30 PINE ST., NEW YORK.  
**REGULAR AUCTION SALES**  
AT 36 PINE ST. EVERY DAY.  
STOCKS and BONDS bought and sold at private sale  
Sale every day at 1 o'clock. See Catalogue.

## CEMENTS.

HUDSON RIVER  
CEMENT COMPANY.

THIS Company is now prepared to furnish at the shortest notice, on the most favorable terms, **HYDRAULIC ROSENDALE CEMENT, NEW SCOTLAND CALCINED PLASTER, FARMERS' PLASTER, and MARBLE DUST**, all of full weight, and of a fine and superior quality.

This Cement is manufactured by the Company from a superior selected quality of Cement Stone, from its extensive Quarries at Rosendale, Ulster Co., N. Y., and has been very extensively used during the past eight years in the construction of **RESERVOIRS, DISTERS, TANKS, BATHS, CELLARS, VAULTS**, etc., and for a variety of purposes "under water," such as **DOCKS, BRIDGES, MILL DAMS, FOUNDATIONS and BREAKWATERS**. It is largely used for any sort of **dry concrete and Underwater Works**. Where strong work is needed, or dampness to be excluded, this Cement is unrivalled. It has the unqualified approbation of the most eminent **ARCHITECTS, ENGINEERS, CONTRACTORS and BUILDERS in AMERICA**, being used in most every department of the **Works under Government**.

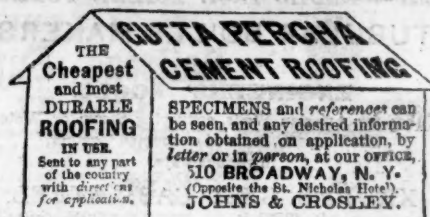
It is put up, for shipping purposes, in tight, well-made, and thoroughly papered barrels—each barrel containing **300 lbs.** of Cement—and shipped direct from the works at **JERSEY CITY, N. J.** (opposite the City of New York), at all seasons of the year, thus avoiding all unnecessary handling. The better condition, therefore, in which its articles are received by purchasers makes it an object for them to purchase its **Hydraulic Rosendale Cement, Calcined Plaster, Farmers' Plaster, and Marble Dust**; and which, if used by persons of experience, never fail to give entire satisfaction. Orders, however extensive they may be, are respectfully solicited from **Dealers, Contractors, Railroad Companies, Masons and others**. Please address, **Hudson River Cement Company, Jersey City, N. J.**, or **J. H. BUTTS, Secretary**. N. B.—Freights obtained by good vessels on the best terms, and Insurance when required.

DELAFIELD & BAXTER'S,  
Late OGDEN & DELAFIELD,  
ROSENDALE CEMENT

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a **superior article** for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

**ROSENDALE HYDRAULIC CEMENT.**  
ROSENDALE and KINGSTON CEMENT CO. Manu-  
facturers at Kingston, N. Y., on the West Bank of the Hud-  
son River. Office 45 Pine st., New York City.  
**E. M. BRIGHAM, Sec'y.**

## ROOFING.



This Roofing can be applied to new and old Roofs of all kinds. It is **FIRE and WATER PROOF**. Gutta Percha Cement applied to Tin and other Metal Roofs will render them perfectly and permanently water-tight.

**JOHNS & CROSLLEY,**  
Sole Manufacturers,  
510 BROADWAY.

PATENT ASPHALTIC  
ROOFING FELT.

THE BEST, CHEAPEST AND

## MOST DURABLE ROOFING KNOWN.

THE IMPROVED PATENT ROOFING FELT furnished by the Subscribers is entirely free from the objections hitherto urged against articles that have been furnished under similar names by various parties.

It makes a **light, cheap, durable**, and perfectly **Fire and Water-proof Roofing** for Churches, Farm Buildings, Railroad Depots, etc. It forms the best and cheapest lining for Stores, Granaries, Barns and Wooden Buildings, as rats, mice and other vermin will not touch it.

It stands all climates and has been extensively furnished to the British Government for use in their widely scattered foreign possessions. The Turkish Government used large quantities of the Felt for roofing their hospitals and stables in the late war.

In this country first class dwelling houses have been roofed for three years with this Felt, and the owners who used tin now prefer this Roofing Felt.

Also an entirely new, superior and cheap **ROOFING CEMENT** for the above Felt and leaky tin roofs. For Samples, Circulars, etc., apply to

**EDMISTON BROS.,**  
No. 3 Bowling Green, New York.  
N. B.—Agents wanted.

## CEMENT ROOFING.

PATENT MICA  
AND  
Fibrous Cement Roofing.

IT HAS STOOD THE BEST OF ALL TESTS—TIME! IT fully sustains the high reputation it has gained, as a **PERFECTLY RELIABLE, DURABLE and WATER PROOF ROOFING**. It is adapted to every variety of Roof, new or old, and is the best and cheapest Cement in use for repairing **OLD LEAKY TIN** or other Roofs.

**ALL WORK WARRANTED.**  
Cement for sale by the Barrel, and sent to any part of the Country, with printed instructions for use. Also, for sale, State and County Rights for a portion of the **UNITED STATES**. **DITTO, PORTER & CO.,** Successors to **JOSEPH DITTO & CO.,** 207 Broadway, cor. of Fulton st., N. Y.

GUTTA  
PERCHA  
ROOFING,

[N] Rolls which anybody can put on; waterproof, elastic, durable, fire-proof; needs no repairs; costs about half as much as Tin, and lasts twice as long. These Roofs are suitable for any style of building. They can be steep or flat, or of any required inclination. Also,

LIQUID  
Gutta Percha Cement,

Preferable to paint for covering Tin Roofs, protecting them for many years from rust, and rendering them water tight. Samples, Terms, Price, etc., furnished on application.

**23 CEDAR ST., NEW YORK.**  
Gutta Percha and Glass Roofing Co.

**J. THOMPSON'S**  
CELEBRATED  
**WASHING-COMPOUND.**  
**D. TAYLOR & CO., Proprietors.**  
Office Cor. Greenwich and Rensselaer Sts.,  
**NEW YORK**

**R. T. EDWARDS,**  
361 PEARL STREET, NEW YORK,  
MANUFACTURERS OF  
**WROUGHT, CAST AND GALVANIZED**  
**P I P E,**

AND EVERY DESCRIPTION OF  
**STEAM, GAS AND WATER FITTINGS,**  
Used by Engineers, Manufacturers, Steam and Gas Fitters,  
Plumbers, etc.

**CAST IRON STREET MAINS,**  
Boiler Flues, Steam Pumps, Steam Valves, Gas Cocks,  
Heater Coils, Steam Gauges, Steam Cocks, Gas Meters,  
Steam Traps, Steam Whistles, Gauge Cocks, Oil Cups,  
Tongs, Pipe Wrenches, Pliers, Proving Pumps, Vices, etc.

## PROFESSIONAL CARDS.

**Alfred W. Craven,**  
Chief Engineer Croton Aqueduct, New York.

**Charles W. Copeland,**  
Steam Marine and Railway Engineer,  
122 Broadway, New York.

**Davidson, M. O.,**  
Chief Engineer Havana Railroad Company.  
HAVANA, CUBA.

**C. Floyd-Jones,**  
Engineer Alton and St. Louis Railroad,  
Residence, Vandalia, Ill.

**Robert B. Gorsuch,**  
City of Mexico,  
MEXICO.

**W. H. Graham,**  
Chief Engineer, Peoria and Hannibal Railroad,  
LEWISTOWN, ILL.

**James H. Grant,**  
Civil Engineer, Atlanta, Ga.

**Theodore D. Judah,**  
Chief Engineer, and Commissioner of  
San Francisco and Sacramento Railroad, and of  
San Francisco and Sacramento Northern Extension Railroad,  
SAN FRANCISCO, CAL.

**Knight & Von Kamecke,**  
CONSULTING Engineers and General Agents. Draw-  
ings of all kinds neatly and promptly executed. Of-  
fice, No. 26 1/2 Broadway, New York.

**S. W. Hill,**  
Mining Eng'r and Surveyor, Eagle River, Lake Superior.

**M. P. Miller,**  
Engineer in charge Savannah River Bridge Charleston &  
Savannah Railroad. SAVANNAH, GA.

**Ellwood Morris,**  
Civil Engineer, Franklin Institute, Philadelphia.

**Mills, John B.,** Civil Engineer,  
Lake Ontario and Hudson R. R. R., 20 Exchange Place, N. Y.

**Osborne, Richard B.,**  
Civil Engineer, Office 227 South 4th st., Philadelphia.

**W. Milnor Roberts,**  
Civil Engineer, Carlisle, Pa.

**Silas Seymour,**  
Consulting Engineer, Real Estate and General Agent,  
No 31 Pine st., New York.

**Shanly, Walter,**  
Grand Trunk Railway, Toronto, Canada.

**Charles L. Schlatter,**  
Chief Engineer Brunswick and Florida Railroad,  
Brunswick, Georgia.

**Charles B. Stuart,**  
Consulting Engineer, 19 Nassau str., New York.



MORRIS K. JESUP.

JOHN KENNEDY.

JAMES RADLEY.

E. R. BENNET.

**M. K. JESUP & COMP'Y,**  
RAILWAY AGENTS & BANKERS,  
44 EXCHANGE PLACE,  
**NEW YORK,**  
AGENTS FOR THE SALE OF  
Foreign and American Railroad Iron,  
AND ALL MATERIALS NECESSARY FOR THE  
Construction, Equipment & Operating of Railways.  
**RAILWAY AND OTHER SECURITIES**  
**BOUGHT AND SOLD**  
Either privately or at the Board of Brokers.

**TAULMAN'S**  
**Railroad Supply Agency,**

No. 7 South William Street,  
**NEW YORK,**  
FOR THE SALE OF  
**ALL MATERIALS USED**  
In Equipment, Repairs & Operating of Railroads,  
Construction of Cars and Manufacturing Purposes.  
Orders for Goods not pertaining to Railroads, solicited  
and promptly executed.

**W. W. TAULMAN.**

J. B. PARSONS.

J. H. DOBBS.

**PARSONS & DOBBS,**  
AND NEGOTIATORS OF SECURITIES,  
3 NASSAU ST. (opposite the Custom House),  
**NEW YORK.**

WE ARE PREPARED TO FURNISH, ON THE SHORTEST NOTICE,  
ALL ARTICLES REQUIRED IN THE  
Construction, Equipment & Operating of Railways.

We also manufacture a superior quality, and every variety of  
**RAILROAD, SHIP & BOAT SPIKES,**  
AND

**WROUGHT IRON RAILROAD CHAIRS,**  
Made from best quality of Iron.  
AGENTS FOR THE  
**JERSEY CITY LOCOMOTIVE WORKS.**

NEW YORK AGENCY

**M. W. BALDWIN & CO.'S**  
**Locomotive Works,**  
**PHILADELPHIA.**

**GILEAD A. SMITH,**  
(late of M. K. JESUP & Co.)

207 BROADWAY,

Corner of Fulton st., NEW YORK.

**RAILROAD IRON**

Of Approved English and American Makers,  
**EQUIPMENT, SUPPLIES**

AND

**FURNISHINGS**

FOR CONSTRUCTION OR MAINTENANCE OF  
**RAILWAYS,**  
ON COMMISSION.

**STOCKS and BONDS**

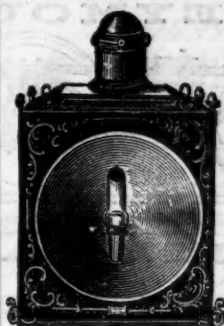
NEGOTIATED PRIVATELY,  
OR AT THE BOARD OF BROKERS.

NEW YORK AGENCY

PITTSBURG, FORT WAYNE &amp; CHICAGO R. R. CO.

REFERENCES:

J. EDGAR THOMSON, Pennsylvania R. R. Co.  
H. W. VANDEGRIFT, Orange and Alexandria R. R. Co.

**E. R. BENNET & CO.,**

162 GREENWICH ST., NEW YORK

**Railroad Supplies and Manufactures,**  
**CAR FINDINGS,**

**MATERIALS** for Locomotive Re-building, Repairs and Railroad Machine shops. Agent for the **BOWLING TIRES, AXLES, CONNECTING RODS, CRANK PINS, PISTON RODS, FRAMES, etc. CAR WHEELS, Machinists' Tools** of all kinds. **SHEET and BAR IRON and STEEL** of various sizes. **FILES, etc., etc. SHEET and ROLLED BRASS, BRASS WORK** of all kinds. **STEAM and WATER GAUGES, LEATHER and GUM BELTING, LACE LEATHER, etc.**

**LUBRICATING AND BURNING OILS.**

Radley's Improved Head-Light, Signal and other Lanterns  
FOR RAILROAD PURPOSES.

Manufacturers of Radley &amp; Hunter's Patent Spark Arrester.

**WM. W. GODDARD,**No. 253 Pearl st., NEW YORK,  
MANUFACTURERS OF ALL KINDS**Braziers & Sheet Copper,**

YELLOW SHEATHING METAL, BOLTS AND NAILS,  
**COPPER BOTTOMS,**  
Locomotive Strips, Tubing Bolts and Bars,  
COPPER AND BRASS RIVETS AND BURS,

Large Flats and extra-sized Sheets, rolled to order at short notice  
**TINNED COPPER OF ALL DIMENSIONS.**  
**INGOT AND PIG COPPER.**

**RAILROAD SUPPLIES.**

**CHARLES T. GILBERT,**  
No. 64 Exchange Place,  
**NEW YORK,**

Is agent for, and prepared to furnish at manufacturers' prices,

**RAILROAD IRON,**  
**LOCOMOTIVE ENGINES,**  
**RAILROAD CARS,**  
**CAR WHEELS,**  
**AXLES, CHAIRS,**  
**SPIKES, TOOLS,**  
**ETC., ETC.**

All inquiries in reference to the above articles will receive  
immediate attention.  
New York, January, 1890.

**WILLIAMS & PAGE,**

67 WATER STREET,  
**Boston, Mass.**

**RAILROAD SUPPLIES.**

**CARS, RAILS, WHEELS, AXLES, SPIKES, DOWLING,**  
Lowmoor, Ames and Nashua Tires. Iron, Cast, Spring  
and Frog Steel. Plush, Car Duck, Car Linings, Waste, Nuts  
Hose, Packing, Belting, and all articles for Rail-  
road use.

REFERENCES.

Capt. Wm. H. SWIFT, W. R. R., PHILADELPHIA, DODGE & Co., N. Y.  
Boston. COOPER, HEWITT & Co.,  
Wm. E. COFFIN & Co., Boston. E. S. CHESBROUGH, Chicago.  
S. M. FELTON, Esq., Philadelphia.

**A. S. & A. G. WHITON,**

32 PINE ST., NEW YORK,

AGENTS FOR THE SALE OF

FOREIGN AND AMERICAN

**RAILROAD IRON,**  
**LOCOMOTIVES,**  
**CHAIRS, SPIKES, AND**  
**RAILWAY SUPPLIES GENERALLY.**

ALSO

**NEGOTIATORS OF SECURITIES.****S. B. BOWLES,**

MANUFACTURER AND DEALER IN

**RAILROAD SUPPLIES,**No. 12 GOLD STREET,  
(Between PLATT and MAIDEN LANE.)**NEW YORK.****GEO. M. FREEMAN,**

SUCCESSOR TO

**PRATT & FREEMAN,**

PHILADELPHIA

**RAILWAY SUPPLY AGENCY,**No. 107 WALNUT STREET,  
**PHILADELPHIA.**

Railroad Materials, Locomotive and Car Findings,

MACHINERY AND MACHINISTS' TOOLS,

**MINERS' TOOLS, ETC.****COTTON WASTE, etc.****WHITE AND YELLOW CAR GREASE,****LOCOMOTIVE BRASS WORK,**

Baggage Checks, Barrows, etc., etc.,

**RAILROAD LANTERNS, SIGNAL LIGHTS,****STEAM GAUGES, COCKS AND WHISTLES,****INDIA RUBBER HOSE PACKINGS, ETC.****LANTERNS OF ALL DESCRIPTIONS,****ENGINE, STATION, AND SIGNAL BELLS,****Superior Car Upholstery, etc.**

AGENCY OF THE KEROSENE OIL COMPANY

Orders solicited, promptly filled, and forwarded with

despatch and care at the manufacturers' lowest prices.

**A. BRIDGES & CO.,**

MANUFACTURERS AND DEALERS IN

**RAILROAD AND CAR****FINDINGS**

AND MACHINERY

OF EVERY DESCRIPTION,

64 COURTLANDT ST., NEW YORK.

**RAILROAD AXLES, WHEELS and CHAIRS,****SPIKES, BOLTS,****NUTS, WASHERS,****CAR, SHIP AND BRIDGE BOLTS.****IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.****STEEL AND RUBBER SPRINGS,****LOCOMOTIVE AND HAND LANTERNS,****PORTABLE FORGES and JACK SCREWS,****COTTON DUCK FOR CAR COVERS,****BRASS AND SILVER TRIMMINGS.**

Also, Sole Agents for the Manufacturers of Car Head Linings.  
Orders for the purchase of goods on commission, made from  
our regular business, respectfully solicited.

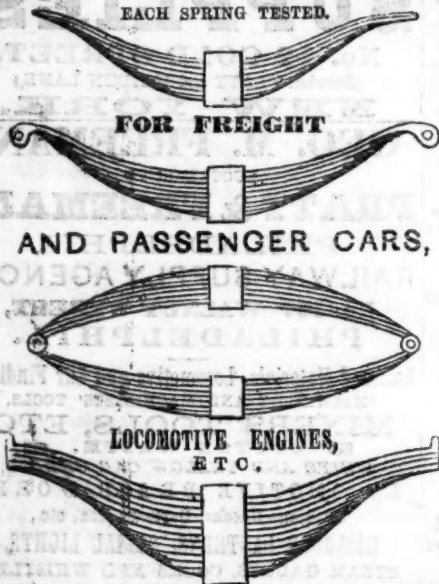
**ALBERT BRIDGES. JOEL C. LANE.**

**EDWIN J. HORNER,**  
SUCCESSOR TO  
**McDANIEL & HORNER,**

LOCOMOTIVE AND RAILROAD  
**CAR SPRING**  
MANUFACTURER,  
WILMINGTON, DELAWARE.

**PHILIP S. JUSTICE,**  
21 North Fifth St., Phila. 54 Cliff St., New York  
152 Congress Street, Boston.

**English Railway Springs,**  
MANUFACTURED OF  
Best Double Faggotted and Improved Cast-Steel  
EACH SPRING TESTED.



EXTRA CAST STEEL FOR TOOLS AND DRILLS,  
E. "CONCENTRIC" SOFT CORE TAP STEEL, (war-  
ranted not to crack in hardening.) best double faggotted and  
Cast SPRING STEEL, ribbed and plain; Machinists' Files,  
"Crescent" Faggotted Axles, Wrought Locomotive and Pas-  
senger CAR WHEELS, Homogeneous Metal, etc. Manufactured by

**CHARLES CAMMELL & CO.,**  
"Cyclops" Steel Works, Sheffield.

**NEW YORK MACHINERY DEPOT.**

**STEVENS, BROTHER & CO.,**  
222 PEARL ST., NEW YORK,

MANUFACTURERS and DEALERS in every description  
of STATIONARY and PORTABLE STEAM EN-  
GINES and BOILERS, WOODWORTH'S PLANERS,  
and all other WOOD WORKING MACHINES

LATHES, PLANERS, DRILLS,  
LEATHER & RUBBER BELTING,  
RABBIT AND OTHER COMPOSITION METALS,  
With all other articles useful in a Machine Shop.

SOLE MANUFACTURERS OF  
"D. DICK'S" Celebrated Anti-Friction

**Shears, Punches & Presses,**

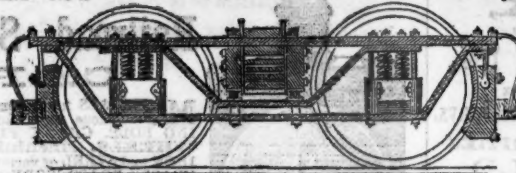
HARRIS' PATENT SIFTING MACHINES,  
JEFFREY'S DOUBLE-ACTING BALL VALVE PUMPS,  
PORTABLE SCALES IN GREAT VARIETY,  
And many other valuable Articles.

**CHARLES A. SEELY,**  
**CHEMIST,**  
121 BROADWAY, NEW YORK.

ANALYSES of Ores, Minerals, Articles of Commerce, etc.  
Advice and Instruction in Chemical Processes generally.  
Advice on Chemical Patents.

THE HUMPHREYSVILLE MANUFACTURING COMPANY,  
(SUCCESSORS TO DWIGHTS, FRENCH & CO.)

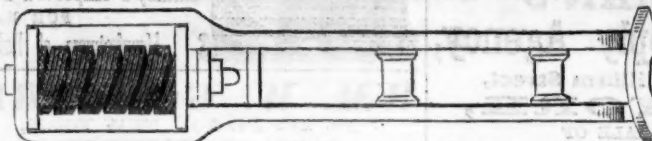
**SEYMOUR, CONN.,**



RAYMOND FRENCH, Pres't, Seymour, Conn.

WM. H. MARSHALL, Treas'r, No. 5 Gold st., N.Y.

**STEEL CAR SPRINGS,**



MANUFACTURED

BY THE

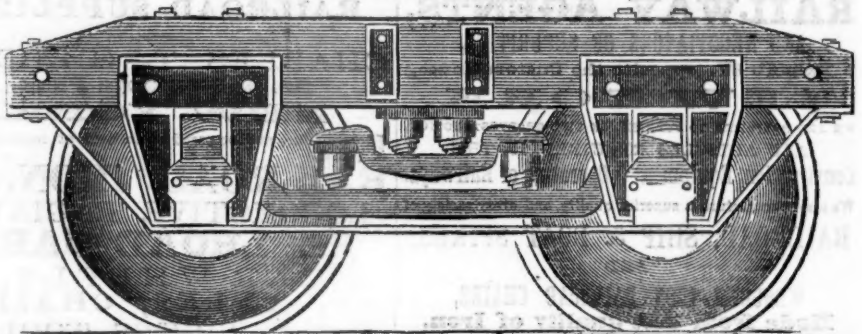
**PATENTEE,**  
**Carlos French,**  
**SEYMOUR, CONN.,**

THESE SPRINGS are now in use on many of the leading Railroads East, South and West. Samples can be ex-  
amined and Price Lists obtained at  
No. 5 Gold st., NEW YORK.

**THE METALLIC CAR SPRING COMPANY**  
**OF NEW YORK,**

Manufacturers of PATENT CONICAL VOLUTE STEEL CAR SPRINGS.

OFFICE, 54 WILLIAM STREET, NEW YORK,



WITH increased capital and facilities, and ability to meet all orders promptly, this Company respectfully invite the atten-  
tion of Railroad Managers, Car and Engine Builders, and others interested in Railroad Machinery and Economy, to  
these Springs, and the improvements in their application. Orders and correspondence solicited.

**CHARLES D. GIBSON, Treasurer.**

**COURTLANDT PALMER, Pres't.**

Jan. 14, 1860.

**RICHARD VOSE, Secretary.**

**JAMES JEFFRIES & SONS,**  
MANUFACTURERS OF  
**LOCOMOTIVE, CAR AND TANK**  
**SPRINGS,**  
PHILADELPHIA, (rear of Girard House.)  
REFERENCES.

M. W. BALDWIN & CO., R. NORRIS & SON, A. WHIT-  
NEY & SONS, Philadelphia, JOS. R. ANDERSON, Rich-  
mond; SMITH & PERKINS, Alexandria, Va.; JNO. EDGAR  
THOMSON, of Penn. R. R. EDWARD C. DALE, of P. G. &  
N. R.R.; S. RUTH, of Rich. F. & P. R.R.; THOS. DODAMEAD  
of Va. Central; URIAH WELLS, Petersburg, H. D. BIRD,  
South Side R. R., Petersburg; C. O. SANFORD, of Petersburg;  
R. R.; JNO. E. McDANIEL, of Va. & Tenn. R. R.; JAS. P.  
ROBERTSON, of Wilmington and M. R. R.; HENRY T.  
PEAKE, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.;  
JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH,  
of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.;  
WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Mont-  
gomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N.  
Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F.  
C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WOR-  
REL, of Seaboard & R. R.; UNION CAR WORKS, Port-  
smouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS,  
WHARTON & PATSCH, Charleston, and all Roads where  
our SPRINGS are in use.

Will be happy to furnish a SET OF SPRINGS to such  
companies as may wish to try their Durability and  
Elasticity, by writing us the Length, Width, Curve over  
all, and the weight which they are to bear.

**DR. A. MERRIMAN,**  
DENTIST,  
1 WAVERLEY PLACE,  
OPPOSITE NEW YORK HOTEL,  
**NEW YORK**

**BARD, BROTHERS & CO.,**  
MANUFACTURERS OF

**GOLD PENS,**  
PEN AND PENCIL CASES,

No. 21 MAIDEN LANE,

**NEW YORK,**

ALSO, MANUFACTURERS OF

**BARD & WILSON'S PATENT**  
**Angular Nib Gold Pens.**

GOLD PENS REPAIRED OR EXCHANGED.

Manufactory, BROOKLYN, Conn.

